



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



243
C



No.

BOSTON
MEDICAL LIBRARY
ASSOCIATION,
19 BOYLSTON PLACE.



1

1

BUFFALO

MEDICAL JOURNAL

AND

MONTHLY REVIEW

OF

MEDICAL AND SURGICAL SCIENCE.

Vol. 13

SANFORD B. HUNT, M. D.,

EDITOR AND PUBLISHER.

AUSTIN FLINT, JR., M. D.,

ASSOCIATE EDITOR.

BUFFALO:
STEAM PRESS OF E. R. JEWETT & CO.
1857.

INDEX TO VOLUME THIRTEENTH.

For original communications, look for the names of the authors as well as the titles of the subjects.

For selected and editorial articles, look for the titles of the subjects only.

For notices of books, look for names of authors.

ILLUSTRATIONS.

	PAGE.
Fibro-plastic Cells and Nuclei, ...	709
Glandular Tube of Parotid, ...	711
Epithelium of Glandular Tube, ...	711

A.	PAGE.		PAGE.
Address of Dr. Willard, ...	703	Biegler, Augustus P., Trial of, for Infanticide, ...	12
Albuminuria Independent of Organic Disease of the Kidneys. By James M. Newman, M. D., ...	589	Bile, Constitution and Physiology of, By Prof. J. C. Dalton, Jr., ...	365, 381
Albuminuria, Connection of, with the Development of Puerperal Convulsions. By Jas. M. Newman, M. D. (Buff. Med. Assoc.), ...	712	Bleeding from the Ear in consequence of an Injury to the Chin, ...	433
Alcoholic Treatment of Tuberculosis. By Theo. Cushing, ...	532	Blood Poisoning. By J. T. Jamieson, M. D., ...	462
American Med. Association, Meeting of, ...	31	Borden's Condensed Milk, ...	421
" " Transactions of, ...	492	Bright's Disease, (Buff. Med. Assoc.)	151
Amylene. By John G. Orton, M. D.,	167	" "	527
Aneurismal Tumor, treated by a New Method, ...	418	Bronchitis, Plastic or Pseudo-membranous, Case of, ...	1
Annual Dinner of the Erie Co. Medical Society, ...	571	Braithwaite's Retrospect, and Ayer's Cherry Pectoral and Cathartic Pills, ...	247
Apoplexy and Paralysis, ...	205	Buffalo Med. Association, Abstract of Proceedings of, ...	149
Arthritis Chronic Rheumatic, Specimen of, (Buff. Med. Assoc.), ...	349	" "	216
Asthma, Cases of, ...	1	" "	268
		" "	346
		" "	403
		" "	536
		" "	665
		" "	712
B.			
Bartlett on the Fevers of the United States, ...	224		

C.		PAGE.	H.		PAGE.
Cancer, Colloid, (Buff. Med. Assoc.),	149		Ecstasy, Case of, ...	139	
Cavities, Pulmonary, Diagnostic value of Symptoms in, ...	50		Embalment, ...	188	
Cataract, Cases and Operations, ...	163		Empyema, Case of, ...	1	
Cazeaux, Midwifery, ...	547		Empyema, Treated by Injection of Iodine, ...	429	
Cents of Copper and Nickel, Discussion of, (Buff. Med. Assoc.), ...	270		Encephaloid Disease of the Antrum, in the Practice of Prof. F. H. Hamilton, M. D. Reported by B. H. Lemon, M. D., ...	355	
Churchill on Diseases of Females, ...	169		Erie Co. Medical Society, Annual Meeting of, ...	628	
Cushing, Thomas. Alcoholic Treatment of Tuberculosis, ...	532		Erysipelas, Muriated Tinct. of Iron taken internally by mistake, (Buff. Med. Assoc.), ...	682	
D.			Eve, Prof. Paul F., Collection of Remarkable Cases in Surgery, ...	381	
Death of Charlotte Brontë, ...	416		Experiments on Chickens, Bending of Bones, (Buff. Med. Assoc.), ...	350	
Death of Dr. Morgan G. Lewis, ...	631		F.		
Deaths, Monthly Record of, (April) ..	45		Fat Men, ...	314	
" " " (May,)	103		Female Doctors, ...	191	
" " " (June,)	183		Fell, the American Cancer Doctor, ..	313	
" " " (July,)	224		Fever, Puerperal, New York Academy of Medicine, ...	105, 226	
" " " (August,)	302		Fever, Typhoid vs. Remittent, ...	59	
" " " (September,)	363		Fever, Typhoid, Case, with Spasmodic Respiration, ...	398	
" " " (October,)	414		Fever, Intermittent, ...	400	
" " " (November,)	501		Flint, Austin, Jr., M. D., Microscopic Examination of Tumor of Parotid, ..	707	
" " " (December,)	553		Fractures. By Prof. F. H. Hamilton, M. D., Superior Maxilla, Ethmoid, and other bones of the Face, ...	257	
" " " (January,)	619		" Zygoma & Zygomatic Arch, ..	321	
" " " (February,)	693		" Inferior Maxilla, ...	385, 449	
" " " (March,)	759		" Sternum, ...	520	
Diagnosis of Cancer, Discussion in the French Academy of Medicine. Translated by C. B. Hutchins, M. D., ...	13		" Ribs and their Cartilages, ...	578	
Dislocation of Elbow, Simple Mode of Reduction of, ...	52		Fracture, Inferior Maxilla. By O. C. Gibbs, M. D., ...	596	
Dislocation of Radius and Ulna Outward, Ancient, ...	684		Fracture, Neck of Femur within the Capsule, (Buff. Med. Assoc.), ...	151	
Dislocation of Hip-Joint, Reduction by Manipulation, Fragments of the Literature. Compiled by Prof. F. H. Hamilton, M. D., ...	325, 514, 581		Fracture, Neck of Femur, with complete Bony Union, (Buff. Med. Assoc.), ...	269	
Dislocation of the Femur upon the Dorsum Ilii, Reduction by Manipulation. By Prof. Frank H. Hamilton, M. D., ...	682		Fracture of the Os Frontis. By B. H. Lemon, M. D., (Buff. Med. Assoc.)	286	
Dissection Wounds. By E. R. Maxson, M. D., ...	472		G.		
Dissection Wounds. Report by J. F. Miner, M. D., (Buff. Med. Assoc.),	478		Gastralgia and Enteralgia, ...	477	
Dissec'n Wounds. (Buff. Med. Ass.)	153				
Duties of State Assayers in Relation to Quack Medicines, ...	417				

Page.	Page.
Gibbs, O. C., M. D., Case of Morbus Coxarius, ...	201
Gibbs, Fracture of Inferior Maxilla, ..	526
Gonorrhoea, with Epididymitis, Case, 100	
Gonorrhoea, with Testitis, Case of, ...	101
Green, Horace, M. D., Lesions of the Epiglottic Cartilage, ...	382
Gross, Prof., Elements of Pathological Anatomy, ...	218
Growths from the Interior of Uterus, (Buff. Med. Assoc.), ...	665
H.	
Hamilton, Prof. R. H., Fracture of Os Hyoidea, ...	130
Hamilton, of Fracture Malar Bones, Superior Maxillary, Ethmoid and other Bones of the Face, ...	257
Hamilton, Fracture of Zygoma and Zygomatic Arch, ...	321
Hamilton, Fracture of Inferior Maxilla, ...	385, 449
Hamilton, Fracture of the Sternum, ..	520
Hamilton, Fracture of the Ribs and their Cartilages, ...	578
Hamilton, Dislocation of Femur upon Dorsum Ilii, Reduction by Manipulation, ...	682
Hamilton, Tumor of Parotid Gland, Extirpation of the entire Gland, ..	705
Hamilton, Reduction of Dislocation of Hip-Bone by Manipulation, Fragments of the Literature of the Method, ...	325, 514, 581
Hard Hit, ...	62
Heart, Disease of Valves, Specimen of, (Buff. Med. Assoc.), ...	488
Health Physician's Annual Report, ..	699
Hernia, Strangulated Femoral, Operation, ...	96
Honors Conferred upon American Physicians, ...	509
Hospital, Buffalo Charity, Cases occurring in the Med. Ward. Treated by Prof. Flint. Reported by A. W. Nichols, M. D., ...	1
" "	65
" "	139
" "	205
" "	291
Hospital, Buffalo Charity, ...	337
" "	398
" "	475
" "	527
" "	608
" "	641
Hospital, Buffalo Charity. Surgical Reports by B. H. Lemon, M. D., ..	95
" "	163
" "	211
" "	351
Hospital, Buffalo General, ...	127
" "	512
Hutchins, C. B., M. D., Translation of the Discussion on the Diagnosis of Cancer, in the French Academy of Medicine, ...	73
Hydrophobia, Case of, (Buff. Med. Assoc.), ...	675
I.	
Imperforate Rectum, Operation successful, (Buff. Med. Assoc.), ...	544
Insanity, Feigned, Detection of, ...	48
Influence of Marriages of Consanguinity upon Offspring, ...	249
Injury to Forearm, Case of, (Buff. Med. Assoc.), ...	403
Isaacs, Structure and Physiology of the Kidney, ...	221
J.	
Jamieson, J. T., M. D.; Pleuro-Pneumonia, ...	197
Jamieson, Blood Poisoning, ...	402
Jenner Monument, ...	251
July Number, ...	127
L.	
Lemon, B. H., M. D., Case of Meningo-Cerebritis occurring in the Practice of Dr. Wilcox, ...	193
M.	
Maxson, E. R., M. D., on Dissection Wounds, ...	473
Marshall Hall, Obituary of, ...	301
McClintock, Dr. James, ...	128
Medical Society of County of Erie, Semi-annual Meeting of, ...	121

	PAGE.		PAGE.
Medical Society of South-Western New York, Constitution of, ...	127	Orton, John G., M. D., Amylene,....	167
Med. Society of South Western New York, Meeting of, ...	127	Os Hyoides, Fracture of. By F. H. Hamilton, M. D.,.....	130
Medical Spiritualism, ...	191	Ovarian Tumor, Specimen of, (Buff. Med. Assoc.),.....	536
Medication of Respiratory Passages, ...	426		
Medico-Legal Insanity, ...	122	P.	
Meacham, Wm. G., M. D., Case of Ur- ticaria, ...	297	Parotid Gland, Complete Extirpation of. By Prof. F. H. Hamilton,....	705
Meningo-Cerebritis, Case in Practice of Dr. Wilcox. Reported by B. H. Lemon, M. D., ...	193	Pathological Society of Philadelphia, ...	704
Mendenhall's Medical Student's Vade Mecum,.....	551	Paracentesis Thoracis,.....	252
Microscopical Examination of Spots of Blood, by M. Robin, ...	535	Paralysis, ...	608
Microscopical Examination of Tumor of Parotid Gland. By A. Flint, Jr., M. D., ...	767	Peaslie's Human Histology,.....	405
Miller, Principles and Practice of Obstetrics, ...	616	Pepsin, Physiological and Chemical Properties, ...	434
Morbus Coxarius, Case of. By O. G. Gibbs, M. D.,.....	201	Perforation of Appendix Vermiformis (Buff. Med. Assoc.),.....	260
More Tinkering, ...	60	Pleuralgia, ...	65
Mucous Membrane of the Uterus, Spe- cimens of Exfoliation of, (Buff. Med. Assoc.),.....	539	Pleuro Pneumonia. By J. T. Jamie- son, M. D.,.....	197
		Pleuritis, Chronic. By Addison Niles, M. D.,.....	330
N.		Pneumonitis, Acute Lobar, ...	291
New Volume, ...	53	Pneumonitis, Acute Lobar. Treat- ment by Opium and Stimulants, ..	337
Neuralgia, Intercostal, ...	65, 401	Powers of County Med. Societies, 151, 188	
New Stand for the Compound Micro- scope, ...	637	Polypus of the Uterus, (Buff. Med. Assoc.), ...	150
Newman, James M., M. D., Albumi- nuria Independent of Organic Dis- ease of the Kidney,.....	589	Poisoning by Syrup of Poppies and Belladonna, (Buff. Med. Assoc.),...	281
Newman, Connection of Albuminuria with the Development of Puerperal Convulsions, and the employment of Chloroform as a Remedial Mea- sure, (Buff. Med. Assoc.), ...	712	Prostration and Coma, the effects of Fatigue, and Exposure to the Heat of the Sun, (Buff. Med. Assoc.)....	346
New Year and Medical Journals,...	509	Professional Honor, ...	442
New York State Med. Society and Medical Fees, ...	242	Prurigo, ...	400
Niles, Addison, M. D., Chronic Pleu- ritis,.....	330	Proceedings of the Physicians' Meet- ing at Cleveland,.....	701
Nott and Gliddon. Indigenous Races of the Earth,.....	90	Pseudo-Apoplexy, Arcus Senilis,...	206
		Ptoxis, Case of, Operation,.....	211
O.		Pulmonary Tuberculosis, ...	641
Opening of Medical Schools,.....	440	Pulmonary Tuberculosis, Bulbous Enlargement of Fingers and Toes, ..	475
		Pulmonary Tuberculosis, with Sub- Acute Rheumatism,.....	477
		Puerperal Convulsions, Case of, (Buff. Med. Assoc.),.....	679
		Pyæmia, Case of, (Buff. Med. Assoc.)	667
		Q.	
		Quarantine Convention, Philadel- phia, May, 1857,.....	115

E.	PAGE.	PAGE.
Reproduction of Bones and Joints after their Removal in cases of Whitlow, ...	572	Synovitis, Sub-acute, Case of,..... 212 Synovitis, with Ulceration of the Car- tilages, ... 214
Respiratory Muscle,.....	424	Sydenham Society,.....503, 635
Rectal Hæmorrhage, (Buff. Med. As- sociation,).....	279	
Revaccination, Experiments in, ...	47	T.
Rheumatism, (Buff. Med. Assoc.)....	216	Thoracentesis, Two cases of,..... 49
Rigby on Female Diseases,.....	38	Transactions of the N. Y. State Med.
Robin, Dr. Ch., of Paris,.....	313	Society, New Hampshire Medical
Rupture of the Gall-Bladder,.....	427	Society, and Penn. State Medical
		Society,..... 356
S.		U.
Sale of Poisons, ...	634	University of Buffalo, ...190, 315, 695
Scales of Bone from the Falx Cerebri, (Buff. Med. Assoc.)	539	Urticaria, Case of. By William G.
Sorghum, or Chinese Sugar Cane, 504, 583		Meacham, M. D.,..... 297
Strictures, Intractible, Beneficial ef- fects of opening the Urethra behind them,.....	51	V.
Stricture, Impassible, Operation,....	352	Vesico-Vaginal Fistula, Case of,.... 351
Surgical Reports, ...	128	
Supra-Renal Capsules, ...	621	W.
Syphilization,.....	54	West, Lectures of Diseases of Wo-
Syphilis, Secondary and Tertiary,		men, Part I,..... 685
Pseudo-membranous Croup, Death, 96		Whisky in Tuberculosis, (Buff. Med.
		Assoc.) 153

Post. to Soc. in Conn. & Phila. Soc.,

Dec. 28, 1868.

53.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 18.

JUNE, 1857.

NO. 1.

ORIGINAL COMMUNICATIONS.

ART. I.—*Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity, AUSTIN FLINT, M. D., Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. III. *Emphysema: Asthma: Plastic or Pseudo-membranous Bronchitis.*

Three cases of emphysema treated in the ward, were made the subject of clinical remarks during the past college session; the first case was not complicated at its commencement to any appreciable degree, with bronchial disease; the second was accompanied by chronic bronchitis, and occurred in a person who had had empyema forty-three years prior to admission into hospital; the third was attended by well-marked paroxysms of asthma and by a rare variety of bronchitis, namely, plastic or pseudo-membranous, in which false membranes in the forms of casts of the bronchior in their shreds, are expelled.

VOL. XIII., NO. 1.—1.

CASE I. Was an instance of emphysema, limited to the upper lobes of the right lung and accompanied by very slight bronchial affection.

P. D. Irish, aged 23, laborer; had intermittent fever a year and a half ago, and much of the time since. Never experienced any pulmonary trouble up to six months ago. Was suddenly attacked, whilst at work, with difficulty of breathing. Had *no cough prior* to this attack, nor any up to four months since. The difficulty of breathing gave him scarcely any inconvenience except on active exercise, when he suffered from deficiency of breath. He thinks, the shortness of breath had been progressively increasing since date of attack. He had no want of breath in *early life, nor at any time prior* to six months ago. Does not know that either of his parents had any asthmatic affection. The cough has gradually increased; it was slight at first; now, it is violent, occurring oftener at night than during the day; the spasmodic character of the cough could not be determined accurately; although since the case was recorded, the cough has appeared to be paroxysmal. The cough is wholly *unattended* by expectoration. He has had no pain in the chest, nor hæmoptysis, at any time. The spleen is now considerably enlarged, and has been so for six months. His aspect is not morbid; appetite good; bowels habitually constipated. There is considerable capillary congestion of backs of hands and of forearms, darkish in hue: no lividity of lips nor of finger-nails. Pulse 68 and small. Respiration 20.

The physical signs on an examination of the chest, disclosed emphysema affecting the upper lobe of the right lung. They were, briefly, as follows: the superior third of right side of chest in front, evidently fuller than same portion of left side; superior costal type of respiration much more marked on left than on right side. Intercostal depressions, below and laterally, equally marked on the two sides. The resonance everywhere on right side, in front, higher in pitch than on left side and vesiculo-tympanitic in quality; amount of sonorousness about the same on both sides. Respiration, over upper and middle thirds of chest, in front; on left side, inspiratory sound tolerably evolved, vesicular, of normal length, with no expiratory sound; on right side, inspiratory sound fuller, vesicular, but *deferred*, frequently not heard at all, with no expiratory sound. A sibilant rale was heard with expiration, in upper scapular region of right side.

He was placed on the use of potassii iodidum, gr. v., 3 times daily; and in about one month after his admission, was discharged from treatment, reporting much improved. The paroxysms of cough were less frequent and less severe; and there was less deficiency of breath on active exercise. For pathology and objects of treatment, vide remarks.

CASE II. Was an instance of emphysema, accompanied by chronic bronchitis, and affecting both sides of the chest.

J. W. Swiss, aged 58, weaver; from the history he gives and from the physical signs afforded by an examination of the chest, it appears that when he was fifteen years of age, he had *empyema* affecting the left side of chest; after an illness of ten months, during which time the operation of *paracentesis thoracis* was performed, he regained his health and continued free from sickness, up to three years ago, working at his loom and on a farm. Three years ago, he had oedema of lower extremities, cough, and pain in the chest. These symptoms disappeared in a short time, but he has had ever since deficiency of breath more troublesome in winter than in summer. He never has had paroxysms of dyspnoea, nor much embarrassment of respiration. He breathes more easily during the night than during the day; preferring a semi-recumbent posture. For three months, he has had cough, and some expectoration: the latter being rather difficult and consisting of transparent, watery mucus, resembling saliva. His aspect was not notably morbid; the cheeks are flushed, the lips of a dull red color; the dorsal surface of hands presents considerable capillary congestion. Respiration 36. Pulse 54.

Physical signs determined the prior existence of empyema, and the presence of emphysema and chronic bronchitis affecting both sides of chest. Inspection determined the type of breathing to be *chiefly abdominal*; but more superior and inferior costal movement on the *right* side than on the left; the intercostal depressions were marked on the anterior and lateral portion of left side; below the level of left nipple, evident flattening and contraction of chest. On percussion, the resonance, on both sides, in front, was clear and vesiculo-tympanitic. On auscultation, on both sides, in front at the upper third of chest, the inspiratory sound was vesicular, rather intense, and *deferred*,* followed by a prolonged and feebler expiratory sound, and a sonorous rale. On the left side, in front and behind, generally, the inspiratory sound was less intense, less vesicular, and more deferred than on the right side. Occasionally, sonorous and sibilant rales on both sides.

The *lac ammoniac* was prescribed and continued until he left the hospital. This medicine gave him marked relief. (The foregoing account was transcribed from the record taken during his sojourn in the ward, from March

* Vide *Flint on the Respiratory Organ*, p. 446.

to May, 1856.) He reëntered the hospital in November following, complaining of difficult respiration, cough, and expectoration. An examination of the chest, afforded much the same physical signs as have been recounted above.

He was suffering from an aggravation of the chronic bronchitis, with which he had been previously troubled. Sibilant and sonorous rales were present, everywhere on both sides: the impulse of the heart was felt in the epigastrium, alone; and both sounds of the heart were heard there distinctly. He was placed on the use of the potassi iodidum, gr. v., 3 times daily, increased so as to take gr. x., 3 times; and continued it for three or four weeks. It was then discontinued, as he reported not improved; the cough and difficulty of breathing continued, with the lividity of lips and capillary congestion of the backs of the hands. He was then placed on the *mistura gum ammoniaci*, from which he has obtained much relief. For the past four months, he has been up and about the wards, complaining of cough and deficiency of breath, which at times are so much increased as to compel him to take the bed, and maintain a semi-recumbent posture. From the ammoniac mixture, and a solution of morphia in the syrup of tolu, he has always obtained *much and speedy relief*.

For parthaeology and objects of treatment, vide remarks.

CASE III. Was an instance of emphysema, accompanied by bronchitis of a rare form, characterized by the expulsion of false membrane from the bronchial tubes, and also attended by well marked paroxysms of asthma.

H. M. German, aged 35, laborer; his father was troubled with paroxysms of asthma; he has been short winded after active exercise, as long as he can remember. He has suffered from attacks of asthma during the past three years only: they have progressively become more and more frequent. He has observed them to occur with changes in the weather. So far as can be ascertained, they are not preceded by cough; and in the intervals, he has not habitual cough. These attacks are followed by cough and by expectoration. At the period of his admission, he was laboring under a severe paroxysm of asthma. He was obliged to maintain the sitting posture in bed; the respiration was labored; the inspiration was shortened and quickened; the expiration labored and prolonged, and accompanied by a peculiar wheezing sound; dry rales existed everywhere, on both sides of chest; resonance on percussion, was clear. In the evening following, after expectoration quite copious, he obtained relief, and was much

more comfortable the next day. The cheeks were congested and of a dusky hue; the lips were livid; expectoration was difficult. He was obliged to maintain a semi-recumbent posture in bed. The skin was warm and dry. Respiration 20. Pulse 112.

Physical signs afforded the evidence of emphysema affecting the upper lobes of both lungs, more marked on the left than on the right side; and the existence of bronchitis. On inspection, the type of breathing was almost entirely abdominal; the intercostal depressions were marked, laterally and inferiorly, with inspiration. Resonance on percussion, on both sides, at the summit, in front and behind, was clear and vesiculo-tympanic; the sonorousness and tympanic quality and elevation of pitch, being greater on the left side than on the right. On auscultation, sibilant and sonorous rales everywhere with expiration, and—to a less extent—with inspiration. At summit of chest, on right side, in front, short, *deferred* inspiratory sound; on same situation, on left side, *no sound* appreciable. Over the precordia, *clear* resonance on percussion; with the dry rales, on auscultation. No apex-impulse of heart, any where; sounds of heart heard most distinctly in the epigastrium. (Vide "Flint on Respiratory Organs, p. 445 and 447.") He was placed on the use of potassii iodidum, gr. v. 3 times daily, and increased to gr. x. 3 times, in a few days. A paroxysm of asthma occurred again in a few days. It will be unnecessary to trace this interesting case farther than this, up to a period when a false membrane was expelled from the bronchial tubes, except to notice the connection between the occurrence of asthmatic paroxysms, and atmospheric changes immediately preceding them; and to glance at the variety and the efficacy of the remedies employed.

Dec. 14th, Dr. F. noticed the barometer to indicate an atmospheric change; on the preceding evening, prior to this, the weather had been pleasant; a storm of rain and snow came on during the night. The patient retired with no apparent difficulty of breathing, no cough, and no expectoration; about midnight, he was suddenly attacked with a paroxysm of asthma, moderate in severity, obliging him to maintain a semi-erect posture in bed; there were present lividity of the lips, capillary congestion of the hands, coldness of the skin, and frequent acts of coughing, attended by expectoration of clear, striated mucus; after which he obtained relief. Passing by several paroxysms, for which reference must be made to the tabular statement appended to this case, on the 24th of Dec., another paroxysm occurred the preceding evening, under which he was suffering at the morning visit *Chloroform* was given by inhalation, freely, but not carried to complete

anæsthesia. It gave the patient *marked* and *immediate* relief. The difficulty of breathing was much diminished; and the patient sank into a deep sleep. Previous to the employment of the chloroform, Dr. F. heard the sibilant rale *very distinctly* over scapular region on both sides; and after the administration of the chloroform, it was presumed to be *less intense*. Passing over another paroxysm in which the relief following the inhalation of this agent was as marked as it was in the preceding attack, on the 4th of Jan., the patient was found laboring under an asthmatic paroxysm which had come on during the night. At 10 A. M., the patient was still in the semi-recumbent posture in bed; the respirations were frequent and labored; during expiration, the sonorous rale could be heard at a distance from the chest; on placing the ear on the chest, the sonorous and the sibilant rales existed *everywhere*; and were musical in some situations. The patient entreated for chloroform; at 10½ A. M., it was given so as to produce nearly complete anæsthesia. The respirations became less frequent and less labored; the expiration was less prolonged; the sonorous rale could *not* be heard at a distance from the chest; the sonorous and sibilant rales were *very much diminished in intensity*, and the paroxysm disappeared about 1 P. M.

In order to bring before the reader, the number of paroxysms this patient experienced, their relation with preceding atmospheric changes, the results of the various remedial agents employed, a tabular statement is here appended.

BUFFALO HOSPITAL REPORT.

No.	Date.	Time.	Period since last Paroxysm.	Degree.	Duration.	State of Weather.	Remedy.	Effects.
1	Dec. 3d.	At night.	At admission.	Severe.	P. M. of 4th.	Atmospheric change.	Morphia.	Relief.
2	" 10th.	Morning.	7 days.	Mild.	P. M. of 10th.	Not observed.	do.	do.
3	" 13th.	Midnight.	3 do.	Severe.	P. M. of 14th.	Atmospheric change.	do.	do.
4	" 18th.	Morning.	5 do.	Mild.	P. M. of 18th.	No change.	Do. in large doses.	Marked relief.
5	" 24th.	Evening.	6 do.	Not severe.	Noon of 25th.	Not observed.	Chloroform.	No do.
6	Jan. 2d.	Night.	9 do.	do.	do. of 3d.	Atmospheric change.	{ Stramonium.	Marked do.
7	" 4th.	Morning.	2 do.	do.	do. of 4th.	No change.	{ Chloroform.	No do.
8	" 5th.	Night.	1 do.	Slight.	A. M. of 6th.	Atmospheric change.	{ Pulv. opii.	Marked do.
9	" 6th.	do.	1 do.	do.	do. of 7th.	do.	{ Morphia.	Relief.
10	" 8th.	Morning.	2 do.	do.	do. of 8th.	do.	do.	do.
11	" 12th.	Afternoon.	4 do.	Severe.	Noon of 13th.	No change.	Chloroform.	Marked relief.
12	" 14th.	Morning.	2 do.	Slight.	do. of 14th.	Not observed.	No medicine.	Slight do.
13	" 19th.	do.	5 do.	do.	do. of 19th.	Atmospheric change.	Nitre.	do.
14	" 22d.	do.	3 do.	Not severe.	do. of 22d.	Not observed.	No med.	Marked do.
15	" 26th.	Evening.	4 do.	Severe.	do. of 27th.	Atmospheric change.	Chloroform.	do.
16	Feb. 3d.	Midnight.	8 do.	do.	do. of 4th.	do.	do.	do.
17	" 17th.	Night.	14 do.	do.	do. of 18th.	do.	False mem. expelled.	End of observation.

Remarks on Table. It will be observed, that the paroxysms generally came on during the night or early in the morning; that they did not occur periodically; that they were variable as regards intensity, and were usually much more severe after a decided change in the atmosphere: almost all of these variations in the weather, were from a cold and dry atmosphere, to a warmer and moister atmosphere. It is also to be noticed, that no paroxysm occurred after or during certain decided atmospheric changes as great as those which, at other times, were followed or accompanied by asthmatic attacks. These paroxysms, even when most severe and when not influenced by remedial agents, did not continue longer than twenty hours.

The remedies employed were of two kinds, those intended to relieve *directly* the asthmatic attacks; and those intended to *prevent* their recurrence. Of the former class, the first three paroxysms were relieved in a measure, though not notably so, by the employment of repeated doses of a mixture of Syrup. Tolutani f. 3 j, with *Morph. Sulph.* gr. $\frac{1}{2}$: this was given every twenty minutes, and appeared to produce *some degree of comfort*. This remedy was also used in the same dose, and with the same result, in three paroxysms numbered 8, 9, and 10 in the tabular statement. *Morphia*, uncombined with the syrup, was given in large doses, (gr. ss. every twenty minutes,) in one paroxysm; and with *more relief* than accompanied its use in the preceding attacks. Two paroxysms were allowed to terminate *without any immediate medication*; they continued about the same length of time as the attacks in which the mixture of tolu and morphia was given; there being no appreciable difference in this respect. The remaining medicines, with one exception, were administered by means of inhalation. The leaves of the *stramonium* were tried during the attacks of asthma; but the patient having made the attempt to inhale the smoke, could not be induced to repeat it; the effort occasioned him discomfort and increased the violence of coughing. After one of these attempts at inhalation, the patient was given a dose of *opium*; but it appeared to have no effect. The *nitrate of potassa* was employed once; coarse paper was dipped in a strong solution of nitre and dried; and then burned in such a manner that the smoke could be inhaled by the patient; the same reluctance to its use was entertained by him, although the small quantity of smoke he did inhale, gave him *slight relief*. In six of the paroxysms, most of them quite *severe*, the patient inhaled *chloroform*; it was never continued so long as to produce complete anæsthesia. It *always produced marked relief*; the difficulty of breathing and the frequency of the respira-

tory movements, were diminished; the cough ceased almost entirely; the patient could take the recumbent posture in bed; and sleep, undisturbed and profound, terminated such paroxysms; the physical signs also gave evidence of its beneficial effects; these results took place *immediately*, and the paroxysm was *much abridged*.

In regard to the remedies employed to prevent the recurrence of the asthmatic attacks, a few words may be said. The *iodide of potassium* was given for nearly nine weeks, and part of the time 30 grains daily were used; he took this medicine from the date of admission to the beginning of February; he suffered less from deficiency of breath than he had prior to entering the hospital; during the period he was exempt from asthmatic attacks; but this article *did not appear to diminish* the severity or the frequency of the paroxysm. After the iodide of potassium had been discontinued, the sulphate of quinia was used for a fortnight and appeared to produce no notable beneficial results. Fowler's solution was next administered and continued until the expulsion of the false membrane; no appreciable effect on the asthma, nor on the general condition of the patient, attended its use: it was given in such doses as to produce constitutional effects, as thirst, puffiness of eyelids, &c.

On the 18th of Feb., whilst laboring under a paroxysm of asthma, and during an act of coughing, "he expectorated, with much difficulty, a solid fibro-cartilaginoid substance about an inch in length, of a conical form; the base of the cone being nearly one quarter of an inch in diameter; the cone was hollow, with about one third of the circumference, in quite the entire length, wanting; the apex was somewhat blunted and not pervious; the walls of the cone were about two or three lines in thickness, and were creased longitudinally; it was opaque and extremely hard, and covered on its interior surface, with thick mucus. Immediately after the expectoration of this substance, the cough and labored breathing were relieved; and from this date to the 1st of March, a period of ten days, he had no cough, nor any marked difficulty of respiration, nor a paroxysm of asthma. About the middle of March, he commenced the use of the syrup of iodide of iron; and for two weeks, during which time the atmospheric changes were great and frequent, he did not suffer from any attack of asthma nor feel any inconvenience in breathing; he was daily out of doors, for several hours. This may be due to the expulsion of the false membrane, or to the change of season, or to the action of the syrup of iodide of iron."

Remarks (a.) Various opinions have been entertained by different observers respecting the cause of *emphysema* of the lung. Some have

regarded it as depending on purely vital conditions, such as diminished elasticity of the pulmonary parenchyma; Laennec supposed that emphysema was produced by more or less occlusion of the finer bronchial tubes by mucus and the accumulation of air behind the seat of obstruction; others have thought that repeated and violent expiratory acts, or coughing, might give rise to emphysema. But, as yet, no satisfactory demonstration has been given of a diminished amount of elasticity or of tone in the air-vesicles; and expiratory efforts, though forcible, do not produce *mechanically* any other effect upon the air-cells, than to empty and contract them. As for the theory of the immortal discoverer of this morbid condition, it appears to be inconsistent with more recent and more extended observations; accumulation of mucus obstructing to a greater or less degree the bronchial tubes, has been found to produce, not dilation nor patescence of the air-vesicles, but collapse or contraction; besides this, the situations where mucus is much more often accumulated, are in the posterior and interior portions of the lung; whilst emphysema affects generally its anterior and thin edges. Dr. W. T. Gairdner, of Edinburgh, has lately advanced an entirely novel and ingenious theory, to account for the production of emphysema of the lung. In the outset, he lays down the following proposition as a law, "that collapse of the lung on becoming permanent, gives rise to a peculiar form of pulmonary atrophy;" and then he brings forward another statement, adducing the results of observation and well-known facts to support it. It is, "that collapse of the lung and pulmonary atrophy are the *invariable accompaniments* of emphysema of the lung: and the last mentioned condition depends essentially on one or both of the former two as its cause." He concludes, that "emphysema is a lesion of *mechanical* origin;" that "it is produced by the *inspiration-force* and *never during expiration*;" and that "it is due *solely and exclusively* to the action of that force upon the *previously sound air-vesicles* which has undergone in other portions, atrophy and collapse," that is, "partial diminution of volume." In the course of the argument, he makes use of the fact, in support of his proposition, that, the mechanical conditions of the lung, are such that it cannot expand, as a whole, or as one or more individual air-cells, beyond the normal extent produced by muscular agency; and hence if one or more portions have been increased in volume, other portions of the lung *must* have been previously *diminished in volume*. But, he believes that this diminution has been existing for some time prior to the development of emphysema. Nothing, however, militates against the idea that sometimes emphysema may be produced by dilatation of the air-vesicles occurring at or very soon after the

beginning of collapse of other air-cells; may not the forces operating to bring about dilation, be the *cause* of the contraction or collapse of other portions of the pulmonary structure? The first of these three cases, seems to have been very recent in its appearance; and there is no evidence in the history of the case, to furnish us with any ground of suspicion of prior pulmonary difficulty. In the second case, however, the facts elicited favor the theory of Dr. G.; and so may the last case.*

Emphysema may exist uncomplicated, but generally it is associated with some bronchial affection, either varieties of bronchitis or spasm of the muscular fibres of the bronchi, producing asthma. In the first case, there was but little bronchial inflammation; in the second case, chronic bronchitis was present; and in the last case, plastic bronchitis and asthma.

The objects of treatment, then, are merely palliative, or preventive of an increase of the emphysema. In the first case, the *iodide of potassium* was employed in moderate doses, *with benefit*. In the second case, *no appreciable relief followed its use*; the *lac ammoniac*, however, was found always to produce *marked relief*, probably by reason of its influence on the bronchitis.

(b.) Asthma is now restricted to a "paroxysmal affection, the morbid condition of which consists in spasmodic contraction of the muscular fibrils of the finer bronchial tubes." The reader may find some interesting and applicable conclusions, in this connection, respecting asthma, in the last Dec. number of the Journal, p. 447, by Dr. Forget. The treatment of the case under consideration, has been already sufficiently commented on, in the remarks on the tabular statement appended to the last case.

(c.) Plastic or pseudo-membranous bronchitis is a rare form of disease. Dr. Watson mentions two cases, and Dr. Peaseock has collected and analyzed forty-eight cases.† It is distinguished from other varieties of bronchitis, by the presence of a sub-crepitant rale limited to a certain portion of the chest, and by the characteristic expectoration. The disease consists in a fibrinous deposit or exudation on the mucus membrane of the smaller bronchial tubes; this exudation resembling the false membranes which occur in the larynx and trachea, in croup. Dr. P. draws the following, among other conclusions, from the analysis of the cases collected by him;

* Vide Brit. and For. Med. Chir. Review, April, 1853, for more extended discussion on the causes of emphysema of the lung.

† Vide American Jour. Med. Science, April, 1855, p. 499, *et seq.*

this disease is more frequent in males than in females; it occurs most frequently between the ages of 20 and 50; it is most commonly found in persons debilitated or not in robust health; it may be acute or chronic, partial or general, idiopathic or symptomatic.

The disease, in the present instance, did not call for remedies to relieve inflammatory symptoms, nor to assist in the expulsion of the membranes; but was directed more especially to the prevention of their farther formation, by means of tonics and of anodynes.

ART. II.—*Trial of Augustus P. Biegler, for Infanticide.*

Dr. Biegler has been a homœopathic practitioner of considerable note in Rochester. On a trial before G. W. Clinton, Justice of the Superior Court of Buffalo, commencing on the 13th of May and terminating on the 20th, he was convicted of manslaughter in the second degree, in procuring an abortion on the person of Amelia Murr, resulting in the death of both mother and child.

Mr. James Humphrey, District Attorney, and Mr. Albert Sawin, conducted the prosecution. The defence was in the hands of Hons. Eli Cook and Solomon G. Haven, of Buffalo, and Alfred Ely, of Rochester.

We shall give the evidence historically, condensing it so far as we can with due reference to the importance of the case. In doing this, we shall pay no regard to the order of the introduction of the witnesses.

Catherine Murr lives in Rochester, is the mother of Amelia Murr. Amelia went to live with Dr. Biegler, as a servant in his family, in September, 1855, being then 17 years old, worked there eight months, after which she came home and staid two weeks. Then Dr. Biegler came, and said that Amelia should go to a Mrs. Moore's, and learn dressmaking. Amelia did so. A month later, that is late in May, 1856, he came and took her trunks away, saying that Amelia was to board at Mrs. Moore's, and cautioning the family not to visit her there.

The Dr. did not take Amelia to Mrs. Moore's, but to a Mrs. Brown's, where he had her boarded as a wealthy patient, suffering with spinal complaint. Nevertheless, Amelia did for some time go regularly to Mrs. Moore's, and work at dressmaking. This labor was entirely discontinued in July. She remained at Mrs. Brown's until Sept. 3, 1856, her family all the time supposing her to be boarding at Mrs. Moore's. During this time

Dr. Biegler visited her every day, with one or two exceptions. On Sundays he usually came twice. He came every evening, remaining two or three hours in Amelia's room, the door being locked. After Amelia had been there two months, Mrs. Brown suspected her to be pregnant from the appearances of her linen.

On the third of September, Biegler took her away, saying that her parents would be in on the cars that day, and Amelia was to go with them and be married. Amelia next appears in Buffalo on the same or a succeeding day. She applied at the house of Mrs. Mercer, No. 7 Scott street, for board; said that her name was Julia Rosendale, that her husband was in California and would be back in the spring to begin a hardware business in Buffalo. At Mrs. Mercer's she remained until her death.

When Amelia left Rochester, her mother felt suspicious, and asked Dr. Biegler where she had gone. Dr. B. assured her that she was married to one Frederick Rosendale, at Erie, a baker; and was well off and happy. A day or two subsequently he came to Mrs. Murr with a letter from Amelia dated at Erie, and stating that she was about to leave for Columbus, Ohio. This letter had no post-mark, but Biegler stated that it had been brought to him by a person from Erie. Mrs. Murr recognized the handwriting of her child, but did not believe the letter. She asked Biegler how far it was to Erie, for if it was not too far she would go and see her, and satisfy herself. Biegler told her that it was more than a thousand miles. (It must be recollected that Mrs. Murr was an old woman, and had been only a year in the country.) After this, Biegler came to her and told her that letters from Amelia to her had been lying in the post-office for eight days. Mrs. Murr said it could not be, for her husband inquired every day. The next day such letters were found in the office; they were subsequently proven to have been mailed at the Rochester office, by the Dr. himself. Mrs. Murr never saw her daughter again until she saw her corpse in Buffalo.

Returning now to Buffalo, where Amelia is living with Mrs. Mercer as Julia Rosendale, we find that Mrs. Mercer knew her to be pregnant, but supposed it to be by the supposititious husband in California. During the time between the 3d of Sept. and the 19th of Dec., Biegler visited her every two weeks as Julia's uncle, "Dr. Rosendale." Sometimes she went out with him, sometimes not.

During this time she was in apparently good health, with some exceptions, which are stated by Mrs. Mercer to have been as follows. She had difficulty in breathing, felt as if she would choke sometimes, had headache, and dimness of vision, considerable cedema of the extremities, and

had fallen down a flight of steps two or three weeks previously. So far, these are only ordinary phenomena of pregnancy, except that perhaps the difficulty of breathing was more marked than usual, for she required to be propped up high in bed in order to sleep.

Some light on her condition at this time is thrown by a visit she paid to Dr. George Burwell of this city. Dr. Burwell examined her, and seems to have detected albuminuria and suspected that she would have puerperal convulsions at her confinement.

But aside from this it is proved that Julia left Mrs. Mercer's in ordinary good health on the evening of the 19th of December, in company with her "uncle Dr. Rosendale," saying she was going to see some friends stopping at the Railroad Hotel in Exchange street. What was her condition immediately on arriving, is not known. On the history of the few hours passed there rests the interest of the case.

Almon Kingsbury, the clerk of the hotel, swears that Biegler entered his name as H. P. Biglow, and was assigned to room No. 1, used as a public parlor, though it had a bedroom opening out of it. It is not proven that any other persons were in the room except as mentioned in the evidence. Having engaged his room, "he said he might have to stop two or three days. He then said he would go and get his lady. He came back before bed time, came down stairs after a lamp, took two, said he had his wife up stairs, then went to his room.

"About 12 o'clock he came down; said his wife was quite unwell; she was sitting up and had phthisic or asthma; thinks Biegler took up a hot sling for her; he went back to his room, and came down again half an hour after; said his lady was quite unwell; wished witness to go up and see her; witness went up; she was sitting in a rocking chair—was breathing hard, and heaving; Biegler said she was subject to such turns; very little was said; witness went down stairs. In a short time Biegler came down and said that she was sick, he would take her to her friends; witness sent a man for a hack and went to bed. He had no baggage that witness saw; saw Dr. again next morning between 6 and 7, when he handed witness a package or box; described the box. Witness and Biegler sat at breakfast together. He said he took the lady home; that the lady of the house refused to take her; that he said to her, "Is she not an old friend and acquaintance of yours!" that the lady answered that she was not prepared to receive a sick woman, particularly without money; that he then gave her money. After breakfast he took the box and went away.

"When he first came he wrote his name on the large register. The

'room-book' was produced; witness swore that it was the book, and that a name on it was one that he copied from the register. Identified Biegler as the man."

It is requisite that all possible light should be thrown upon Julia's condition at this time. Daniel Brasill, the porter of the house, testifies that he "helped the Dr. get the woman down stairs. She was in the sitting-room, breathing hard. In getting her down, she bore most of her weight on the Dr. Walked with some difficulty about her hips. The Dr. went away with the carriage, came back again, said the woman's husband was in California, and left in his or her aunt's charge, and he would not like to see anything happen to her. He called for something to drink, and treated three or four boys.

Reed Stafford, the hackman who conveyed them back to the house of Mrs. Mercer, swears that he "helped her into the carriage with some one else. Biegler got in with her. She walked with difficulty and was raised into the carriage. Testified to assisting her in the house, No. 7 Scott street, and that she walked with difficulty, was partly carried. Waited some time for the Dr., finally went into the house. He took Biegler back to the hotel."

At Mrs. Mercer's, Julia was placed in a chair. Mrs. M. says; "The Dr. came to witness' room and asked if she was asleep. Asked her to get up and do something for this poor woman, for she was dying, she had such a cold. Got up and went into Julia's room, she was sitting on a chair. Dr. said Julia had a very heavy cold, she had asthma; cases of that kind were dangerous and must be seen to immediately. Told her to build a fire, warm some blankets, and get Julia to bed. Witness told Dr. that if she was so sick he must give her some money. . He handed witness six dollars—witness thought it not enough. Dr. then gave her sixteen dollars, and took a receipt. He wrote the direction for a doctor in witness' pocket book, "Dr. N. H. Warner, 362 Washington street." He also wrote his address in the pocket book on the other side. It reads, "Mr. Frederick Rosendale. Rochester, in care of Dr. H. P. Biegler.

"Dr. then left, said he would call again next morning. Witness then undressed Julia, she was too sick to help herself much. She sat in one position, did not move or stir at all, had her head down, her hair hanging loose. She appeared in great pain, breathed very quick and heavy, could hardly draw her breath. She could not help herself into bed, and could not lay down, when witness put her there. She was in great pain all night,

complained of cold. Next morning Dr. Biegler came again, asked how Julia was, and if we had sent for the Dr.

Biegler then went away, and Dr. Warner was called. Dr. Warner testifies to asthmatic breathing. His attention was not directed to her pregnancy or liability to confinement. He prescribed and left. That afternoon (Saturday) while Mrs. Mercer was getting Julia up to fix the bed, she learned that her vulva was very much swollen. Mrs. Mercer went for Dr. Warner, but his partner, Dr. Kenyon, came. She was then removed into the front room, Dr. Kenyon assisting. She could not stand on her feet, but walked with her feet wide apart. Dr. Kenyon testifies that the labia were swollen very much and roughened. That he introduced his finger, she manifesting pain. Found no signs of labor, but a little, *old* clot of blood came away on his finger. Previous to her removal, she attempted to sit in a chair, but sprang up manifesting pain.

These are the essential particulars of the condition of Julia at the time of her return. On Sunday morning it was found that she had raised blood quite freely during the night. She continued to sink during the day, and with the consciousness of death upon her, maintained an entire secrecy as to the cause of her illness, only saying that she had taken cold. She was asked if she wished to send any message, and did request that "her uncle" be informed by telegraph.

A little after nine she wished a chair placed to her feet, a probable indication of expulsive labor pains. The only circumstances attending the delivery of her child were that, only a Mr. Williams being in the room, she said she felt something give way. Williams went out and called in the women. She grasped their hands, raised up looking wildly, and had something like a convulsion. They looked in the bed, found a dead foetus between her limbs, born apparently in a natural presentation, covered it up, and half an hour later, at about half-past ten on Sunday night, the poor girl died.

Dr. Kenyon came before her death and removed the secundines. He left, having, for some reason unexplained, cautioned the people to care in washing the child. Williams first sees the child rolled up in a towel under the edge of the bed. Dr. K. unrolled the towel, and Williams saw three marks on one breast, two on the other, one on the thigh, and one on the ankle, at the time Dr. K. removed the towel; thinks the two marks on the breast were on the left side; these marks were oblong, about the size of a three cent piece, all of a size except on the thigh and ankles, they were more like a scratch; saw the same spots when the child was washed.

On his cross-examination he called them flesh wounds. Mary Keeler washed the child and saw marks on the breast "something larger than a darning needle." Mrs. Gilbert first noticed spots on the child Monday morning; saw the spots on the side, three in a row, half an inch long, they were straight lines; saw spots on the ankles, the skin was roughed up and hanging. On Monday, Dr. S. E. S. H. Nott, the coroner, saw the bodies and noticed marks on the child. On Tuesday he held an inquest, at which Dr. Warner, Garvin, and Jansen, (a medical student,) were present. All of these witnesses subsequently testified to a superficial examination of the child, in which they saw marks thus described by Dr. Warner. There were several marks upon the chest, two seeming to have been made with a round instrument, one on each side; also, one on the abdomen three quarters of an inch in length and transverse the body, seemed to be through the true skin. Another on the left arm seeming to have been made from below upward. There were some other abrasions about the ankles and wrists. Could not say whether the wounds were made during life or after death. There was an appearance of blood on the wounds which led witness to suppose that they were inflicted before birth, or at any rate before the child was cold. At the same time they made a partial examination of the mother. They found what they considered an inflammatory condition of the organs of generation and bowels, and also lacerations in the vulva, with considerable ecchymosis. On Tuesday Dr. Nott issued his warrant, and Biegler was arrested at Rochester. On Wednesday, the 24th of December, at the instance of the prisoner, another examination was had at the shop of Kraft & Gray, undertakers. Were present at this examination, Prof. Flint, Prof. Hamilton, and Dr. Ellery P. Smith, as examining physicians. Drs. Garvin and Nott were also present by invitation, and the prisoner was there. Only the cavity of the abdomen had been opened at the first examination. On this occasion it was extended to the chest.

Prof. Flint testifies as to the child that he did not examine it. His attention was particularly directed to the lungs, which he found extensively congested and engorged. This congestion was very uniform. A doubt existed as to how much of it was due to a prolonged process of death. The heart was large, measuring five inches in its longest diameter, and four in its greatest transverse diameter. The wall of the left ventricle measured more than three quarters of an inch in thickness. Saw no lymph on the bowels. Was not requested to examine the organs of generation.

Prof. Hamilton testified to the same effect, as to the lungs and heart. Examined the child, found various spots upon it when the cuticle had been

raised, produced similar spots himself. Did not see any punctures. At the time, he was satisfied that no punctures existed, but could not say that they did not—that is after other witnesses had testified to finding them in a careful examination. As to the mother, he testified to abrasion of the vulva and ecchymosis then. Saw no lesion on the womb.

Dr. Ellery P. Smith conducted this examination. He testifies to the lungs very much as Dr. Flint and Hamilton do. He said on the stand: I examined the child for the purpose of finding whether it had received any injuries. I found four or five superficial abrasions upon its body and limbs. There were two on the chest. The others were between the knee and ankle. Found nothing passing beneath the true skin. Saw nothing that resembled a puncture. The cuticle was very soft. A very slight pressure of the finger would produce marks similar to those on the body of the child. There were no wounds on the head.

No other witnesses testified to this examination on the final trial. Shortly after it occurred, Coroner Nott granted an examination to the prisoner, which occupied several days. All witnesses hitherto mentioned were sworn at this time. A degree of discrepancy existed, all testifying alike as to the condition of the lungs, while the punctures seen by all the lay witnesses, and Drs. Warner, Garvin, Nott, and Jansen, are not seen at the second inquiry. In view of this, the district attorney instituted a third autopsy, which began at the Medical College on the 30th of January, three weeks after death, and continued during the afternoons of three days. This was conducted by Profs. White and Hunt, and Dr. A. W. Nichols, Demonstrator of Anatomy. During some part of the time, Drs. Nott, Garvin, and Mr. Jansen, were present. Its result is thus stated in Prof. White's testimony. The child was but slightly decomposed. The scarf skin was easily torn by the nail; stated inferences therefrom. The fetus had not been dissected previously. It did not much exceed six months in fetal age. The bones of the head were soft, the spaces between them very large, the eyelids adherent, the membrane closing the pupil was still there, the funis attached near the hips, the measurement of the fetus was 16 inches in length, 9 of which being in head and body, the remainder below; its weight a little less than $3\frac{1}{2}$ lbs., the weight and length greater than usual at this period, according to European authorities; but these signs are not so fixed as the others enumerated. There were a good many marks on the child, on the breast, ankle, &c.; most of them of doubtful character. The mark which attracted most attention was on the right breast, quarter of an inch in depth, apparently made by an instrument an eighth to a sixth of an inch in diameter;

it was a punctured wound, made from above downwards, peeling up the scarf skin and penetrating through the true skin. The part containing this wound was carefully dissected out, an incision was made across it, showing that blood had coagulated in the skin and underneath it to the depth of half an inch. In his opinion this showed that the wound had been inflicted during life, or so soon after death that the circulation had not ceased. The nails were membranous, not horny. The lungs of the child were removed and tested. It had never breathed. In relation to the other wounds on the child, they were not conclusive. Described the post-mortem appearances of the mother. The body was but slightly decomposed. The limbs were swollen below the knee, not much, if any, above. * * *

He testified to an important wound on the person of the mother, apparently made by an instrument similar to that which had inflicted the wounds upon the child. Some evidences of incipient inflammation were described in the same location. The intestines in the immediate vicinity were injected, discolored, and had some slight deposits of lymph upon them; also slight adhesions of the intestines to each other; these signs indicating inflammation. Supposed there was a connection between the wounds and the inflammation, as cause and effect. This inflammation had not made much progress.

From the appearance and position of the wounds on mother and child, he could account for them by supposing the use of a long metallic instrument for procuring abortion. Witness gave a theory or statement of how this would be likely to occur. Testified that such a wound as that on the child would necessarily result in miscarriage, at a time varying from one to four, five or six days. * * *

On the dissection of the brain found nothing unhealthy. The lungs were detached; in the cavity of the chest was considerable bloody fluid; a number of incisions had been made in the substance of the lungs; some evidences of old pleural adhesions; the lungs were engorged; this condition was very general, but was most conspicuous on the lower portions. Color was a dark red; lung crepitated less than usual between the fingers; a cut in them was smooth, their specific gravity increased; portions cut from the lower parts floated in water; the entire lungs also floated. They weighed two pounds and six ounces. They were not very friable, and on being torn they did not present the granular appearance of inflammation of the lungs. Testified that he could not say whether this engorgement of the lungs took place before or after death. Such a condition is often found when death has been slow, or the subject has lain something before examination.

The heart weight 14½ ounces, which is above the natural size. The

longest diameter of the heart was 5 inches, the greatest transverse diameter 4 inches, walls of left ventricle $\frac{3}{4}$ of an inch, walls of right ventricle a little more than $\frac{1}{2}$ of an inch. Persons may live many years with such a heart; it might embarrass them in rapid motion; any shock would be more serious, asthmatic breathing is a frequent result of it.

The spleen weighed 6 ounces, healthy; the liver, 3 lbs. 14 ounces, healthy; the pancreas healthy; the kidneys weighed (the right) 4 oz., the left, 4 oz. 1 dram. Both presented some evidences of Brights Disease—perhaps not more than was due to causes already named.

The existence of this disease was confirmed by the swelling of the limbs. Prof. Hunt and Dr. Nichols testified to the same effect. This examination and its result were kept secret. A son of Dr. Biegler applied to Dr. Nichols for information, offering money for it. He was, of course, refused.

On the 28th January, the body was for the second time disinterred, and another autopsy held at the instance of the prisoner. Dr. E. P. Smith testifies: I made a second examination on the 28th January. The bodies were in good preservation, little or no decomposition having taken place. It was made at Kraft & Gray's. Drs. Hamilton, Winne, Flint, Burwell, and myself, were present. I performed the autopsy. The child's breast bone was turned up, and its head was not there. I examined the body of the child carefully for punctures. Had heard the testimony of Drs. Garvin and Warner. We examined the whole surface of the child's body with a magnifying glass, every abrasion being examined with particular care. The only wounds we found on the child were where the chest had been cut through to raise the breast bone. Examined below the nipple, on both sides. Did not discover that the skin had been punctured anywhere. The glass used was of three diameters. We examined the uterus and vagina with lenses, and found no puncture of any description. A long time was spent in this examination. We did not discover that any portion of the skin had been removed by the knife; had there been, we should have discovered it. The breast bone had been turned over. Had heard that Drs. Hunt and White had made an examination. Had not heard that they discovered a puncture. Dr. Winne testifies to the same purport with Dr. Smith, as do also Drs. Hamilton and Burwell, except that these gentlemen say that they did not discover the absence of the piece of skin removed by Prof. Hunt, and go no further except to suppose that an incision made across the breast may have been made through the opening left by the piece removed, which would, in the elastic skin of a six months fœtus, be likely to conceal it. Subsequently, Drs. Hunt, White, and Nichols, testify

positively to its removal. This is all the evidence in the case, except the opinions of witnesses, which we have in every instance so far as possible omitted. The only allusion we shall make to opinions will be in our sketch of the arguments of counsel, or in the charge to the jury by Judge Clinton.

Hon. Solomon G. Haven addressed the jury on the part of the defence. After a brief reference to circumstantial testimony, he left the question of motive entirely to the jury. The evidences of dissimulation by Biegler were before them, but he did not consider them as properly a part of the case, which he wished to try on its real issue; whether the prisoner did feloniously use instruments on the body of Amelia Muir with the intent to procure abortion. The use of drugs for this purpose was ruled out by the fact that such as Biegler had from time to time prescribed to her were proven to be harmless.

On the single question of the use of an instrument, the prosecution had produced 27 witnesses; eight or ten of them medical men. He wished to carry the theory of the prosecution and that of the defence along together. They show Amelia in a state of good health at Mrs. Mercer's, that she left the house on the evening of Dec. 19th, and we find her next, at about 11 P. M., sick at the Railroad Hotel; that she was helped into a carriage, taken home, and continued ill through Saturday until Sunday night, when she died. The prosecution begin by the presence of many punctures on the body of the child, they come down to a single wound no bigger than the head of a pin. As to the laceration of the vulva, only one examination was made before the death of the mother; that is made by Dr. Kenyon, and there is no evidence that he discovered it then. His hand was the first on the parts, he oiled his hand, showing that the introduction of it was difficult, and who can tell that it did not cause the laceration? He found no laceration, but it should have been there according to the theory of the prosecution, and must have been occasioned by the birth of the child. Every physician testifies that such laceration is not infrequent at the birth of a first child. But if another cause is sought, is not Dr. Kenyon's hand as large as Dr. Biegler's? Again, it is not proven that there was any soreness of the vulva. Mrs. Mercer calls it swelling, and says nothing about soreness. For weeks her limbs had been enormously swollen all the way up to the abdomen, and the swelling is proven to be usual in pregnancy.

Mr. Haven went on to advance a theory as to the cause of Amelia's death. She went out with Biegler on a cold, inclement night; it was raining and freezing as it fell; and was it not to be expected that in her feeble health disastrous results would follow? Dr. Warner finds her laboring under

disease of the lungs; she said nothing about any trouble below. Have we not a plain, palpable state of facts to account for this death? Why look further for a cause? She had difficult breathing before. Dr. Winne tells us the effect of puncturing the sac would be to relieve difficult breathing. Dr. Burwell's evidence shows that, with the foresight of a true physician, five or six weeks before her death he judged from her appearance (oedema) that she would have convulsions when she was confined—as she did have—and cautioned her against the exposure that finally caused her death. She was almost blind, she had headache, sleeplessness, could not rest from difficulty of breathing except almost in an upright position; she had swelled limbs, and had fallen down the steps. In this condition she was exposed to inclement weather. Add to this the post-mortem appearances, the engorged lungs, the enlarged heart, the dropsical pericardium, the Bright's disease, and the congestion tendencies of pregnancy. This was her condition at 9 P. M., for Biegler came in on the cars at that time. They went down to the Railroad Hotel, without any secrecy, and went into room No. 1, a public reception room for travellers. Would the prisoner have chosen such a public place for the commission of a crime?

About 11 P. M. Biegler tells the inmates of the house that she is very ill. The medical witnesses swear to injurious consequences of this exposure. Biegler was a man of skill. He came here with his credentials from the University of Berlin; is it possible that he would have made such a bungling operation? How could he have wounded the breast of the child and not its head? Dr. White is entitled to a patent for showing how, but Dr. Smith, and Winne, and Havill, and Knickling, all contradict it. Dr. Rochester is brought here to testify that he has touched the breast of a child with his finger. Was it not a shoulder presentation that he thus touched?

The prosecution say that the puncture on the right side presupposes a puncture of the sac. This part of their case is made to hinge entirely on the College examination, made three weeks after death. The child had been examined twice before. The second examination was made at Biegler's request, open and public, in the light of day. If there were any wounds on the child did he not know it? But no wounds are found, Dr. Smith asserts positively that none are there, Dr. Hamilton says that he should not have not thought it possible that any were there, had he not heard afterwards that there were. Why is the College examination so secret, conducted under double locks and double keys, and not a word of its results allowed to be whispered? Dr. Hunt, five minutes before the termination of this case, attempts to explain this secrecy; he feels the weight

of public opinion crushing him down. There is something rotten in this secrecy. They cover up their tracks; they throw away the piece of skin said to contain the puncture, and shut it out forever from future examination; and they steal away the remains of the dead. Dr. Nichols testifies that he now has the head of that child. But even in this examination all the marks on the child have disappeared but one. How do they describe it? Dr. Havill tells us—and he is a man of genius—that such a wound should have been an areola; but no such areola is described by these witnesses.

Mr. Haven then commented on the testimony of Dr. White. In describing the wound upon the child, he mentions no external appearances. A barely perceptible mark upon the skin is fixed upon. No ecchymosis is seen there, but the witnesses rely only on internal appearances; for had there been any external evidences of violence, the second examination would have shown them. This College examination was conducted, not in the light of day and before witnesses, but in secret, in the gloomy, unanswering walls of that room; with double locks and double keys. Professors Flint and Hamilton, teachers in the same school, were carefully excluded and shut out from a knowledge of what had taken place. Drs. White and Hunt, and Nichols, are honorable and scientific gentlemen. I do not intend to impeach them, but there is something so rotten in this secrecy that five minutes before the close of this case, Dr. Hunt comes upon the stand here, and asks for a chance to explain it, at a time where we had no opportunity to meet it. He knew that that an explanation was necessary, that the weight of public opinion was crushing him down. Then there is the fourth examination, in which Drs. Winne, Smith, and Burwell, could find no part missing. Smith testifies that it could not have been removed without his knowledge. Where is this piece Dr. Hunt claims to have thrown away? All these witnesses tell you that the edges of the cuts came in perfect coaptation. I do not intend to infer falsehood, but in one of these examinations everything is open, in the other, everything concealed.

The evidence does not hang together. Mrs. Keeler testifies that she rubbed the skin off the breast of the child in washing it, and the evidence excludes all the spots except one on the breast. Dr. White testifies that this wound *may* have been made just after death; but he covers up his tracks and precludes another examination by throwing the piece of skin away.

Mr. Haven then took up the wound on the uterus, dwelt upon its size, and on the fact that by splitting it up they had forever removed all traces of it. Dr. White, again, says that the hæmorrhage and fluids at the Rail-

road Hotel might have been absorbed in a napkin or napkins. Common sense teaches that this room was public; open to every one, and that the traces of the crime could not have been thus concealed. In examining Julia's bed, Mrs. Mercer found no traces of labor, no hæmorrhage, only a little water as if an infant had wet it; and in the front room a little streak of blood on the sheet which was probably expectorated. Mr. Haven then summed up the various inconsistencies of the case, and urged the possibility that these wounds might be anomalies, vagaries of foetal life.

In respect to the question of motive, why did the prisoner wait till an improbable and inconvenient time and place to commit this crime? It should have been done earlier. Again preparations had been made for confinement, and the abortion implies an improbable abandonment of that intention.

Mr. Haven closed by a brief review of what he had said, and with a characteristic bluntness, closed his speech without any rhetorical flourish.

MR. SAWIN'S ARGUMENT.

Mr. Sawin complimented the jury on the calm and sober attention they had bestowed on this case. The general theory of the prosecution is that an instrument was applied to Amelia Murr with an intent to procure abortion, and that its necessary effect was to destroy the child and endanger her own life. Two issues are made by the defence, one that no attempt was made, and the other that, if it was made, Amelia's life was not shortened thereby.

Mr. Sawin then took up the case *seriatim*. He traced Amelia to the Railroad Hotel in good health, she comes away unable to walk. What occurred during that time? Dr. Havill's testimony shows that an abortion at the sixth month is difficult, and that the natural result would be a bruising of the soft parts. She had a dropsical condition of the extremities before, but no one pretends that it had caused, or could cause, such soreness of the labia that Amelia could not sit down in a chair without screaming; or that Dr. Kenyon could not examine the parts without giving her much pain. She did not have this swelling when she went out with Biegler, but only six or seven hours afterward it is there, and no natural cause can account for it. Labor was not a cause, for Dr. Kenyon tells you that not a symptom of labor was present when he examined. He says that the os uteri was roughened on the surface, that the parts were dry, and that a little old, dry, clotted blood came away on his finger; not the fresh blood of

the usual show. The next evidence as to the condition of the parts is Dr. Warner. He finds the same swelling after death; Jansen swears to inflammation and laceration of the vulva; and Drs. White and Haven testify that this laceration could not in any probability be caused by the delivery of a half formed, flexible six-months foetus. On the 24th of Dec., Dr. Flint examines, and tells you of inflammation and swelling at the vulva; and the whole testimony on this point places it beyond a doubt that violence was inflicted on the parts on this Friday night.

There would be a natural expectation that evidences of this violence should be found farther up. Drs. Warner, Garvin, and Jansen, swear that the edges of the os were roughened, (abraded,) and that there were appearances of inflammation.

On the 24th, Dr. Flint does not examine the uterus at all, and Drs. Hamilton and Smith make only a casual examination by candle light, in a cold lumber-room. On the third examination a careful search is made with the aid of lenses, and a wound is found, small, but distinct, on the os uteri. (Mr. Sawin here defended the physicians present on the third examination from the charge of secrecy made by Mr. Haven. The examination was secret, by order of the District Attorney, and the results were kept concealed lest Biegler should forfeit his bail and run away.)

At the fourth examination made by Drs. Burwell, Winne, Smith, and Hamilton, this wound was not seen for the reason that it had been necessarily obliterated by Drs. White and Hunt in investigating it. The wound on the os uteri is indisputable. That Biegler is skilful in procuring abortion, is no argument against it. The most skilful criminals leave their marks behind them, and he, without regard for the life of the mother, meant to make this thing certain.

Next we come to the foetus. Wounds existed upon it. Wounds of some kind are sworn to by every witness, lay or medical. Mr. Sawin summed up the evidence on this point at length, and severely censured Dr. Smith for testifying that the square of skin removed removed on the third examination was not missed at the fourth, and that if any such piece had been removed, he should have discovered it.

Why was not the head wounded? Dr. Rochester's evidence proves, experimentally, that this implies no improbability.

Interference by an instrument, then, is proved. Now, who used the instrument? The most skilful criminals are likely to leave a virtual confession behind them. So here, Biegler has confessed this crime. He writes his name on the hotel register as Biglow and wife, and, in writing hypocritical

letters to Dr. Warner as to the death of his victim, he speaks of Mr. Rosendale, her uncle, throughout as his informant, while the fact stands out in glaring colors that he himself is that uncle Rosendale. If he is such a skillful man, this graduate of the University of Berlin, he knew better than to expose his patient to the inclemencies of such a night when in her delicate health. He called in Kingsbury to be sure, but why? He was afraid that his victim might die there alone with him in that room. But he had no tender regard for her. When the rough hack-driver noticed her dying condition, and volunteered to go for a doctor, Biegler refused to have him do so.

Having settled that violence was used, and that by Biegler, it remains to consider the effect on the life of the mother. No matter how much disease she had about her, if Biegler shortened her life one moment he was responsible to the law. If she died of cold, taken by exposure, while on her way to the hotel, he was equally responsible for that, for it was a part of the felonious act. Mr. Sawin then closed by an eloquent sketch of the faithful heart with which this poor girl clung to her destroyer, and of the strange power which he seems to have exercised over her throughout.

(These reports of the arguments of Mr. Haven and Mr. Sawin are mere skeleton notes. Each speech occupied between three and four hours. Judge Clinton's charge was equally lengthy, and only a meagre note of it can be made.)

JUDGE CLINTON'S CHARGE.

On the 21st of December last, Amelia Murr gave birth to a dead child, and herself died about half an hour thereafter. There has been no attempt to show that—if an abortion *was* procured—it was necessary to the preservation of the life of the mother. If any abortion, then, was committed, it was done feloniously, but in order to find the prisoner guilty, you must be satisfied on five points. First, that an instrument was used; second, that the prisoner was the man who used it; third, that the child was quick; fourth, that there was an intention feloniously to cause the death of the child; and fifth, that the death of either mother or child resulted.

At the outset, Judge Clinton cautioned the jury as to the necessity of diverting themselves of all feeling; the more so as this Amelia Murr had a most sad and tragic history. He then took up the five points, but not in the order laid down above.

1. Was the child living? A week before her death Amelia spoke to

Mrs. Mercer of the vigorous motion of the child. In considering this point, you must regard Biegler as a physician, clothed with reasonable knowledge. As a physician, could he have had any motive for procuring the abortion if the child were not quick. Was he innocent, or had he motives for concealing? Again, if you are satisfied that there were punctures on the body of the child, then may you not also be satisfied that the child was alive when at the hotel? Mr. Haven supposes that the punctures, if there were any, were made in washing the child. Does it or does it not follow from the character of these marks that the child was alive a short time before its birth?

2. Assuming that the child was quick, were the instruments used with an intent to destroy it? A person committing any act is presumed to anticipate the usual consequences. If the natural consequence is to cause death, then the presumption is that such was the intent.

3. If the child was quick, and an instrument was used with an intent to destroy it, was Biegler the man who used it? In answering this, you may properly consider these questions. Had any one else opportunity? Is there any reason to believe that any one else did employ instruments, or had any motive to do so? Had any one else a motive to destroy the mother? Was he the father of the child? The testimony of Mrs. Murr as to Amelia's residence of eight months in the house of Biegler in the capacity of a menial; her subsequent employment at Mrs. Moore's; his arrangement with Mrs. Brown and the concealment of her residence from her parents; the fact of his daily visits there; that Amelia's room was locked when he was with her; that he introduced her to Mrs. Brown as a patient, not disclosing to Mrs. B. the residence of her parents; that there is no evidence that she had any spinal disease whatever; her removal to Mrs. Mercer's; her going there under his sanction by a false name; that in communicating with her parents, he concealed her whereabouts; all these facts are evidence as to the question whether he was the father of the child. You may inquire why he should take this deep interest in the girl? If he was the father, does it disclose a motive—I do not mean an adequate motive—to produce abortion on this girl? Had he so entangled himself by his falsehoods that the death of the mother or child would be desirable? Was it desirable to prevent his exposure to the public and his family as a seducer? Did he show a want of proper care as a physician in taking her out on that wild and stormy night? Did he by that act manifest himself an indifference to the life of mother and child? Again, you may ask what honest motive could have prompted him to take her out to that hotel; an

act so dangerous. If he had an honest motive, why should he use a false pretence and palm her off as his wife? And now, if he had a motive and an opportunity, had he the means? Does the evidence satisfy you that a single wire carried in his pocket was a sufficient instrument? Was there anything in his letters to indicate that he knew of an abortion on the girl?

4. The fourth question is—Was an instrument employed? It will not do for the prosecution to show that other means, such as his hand, were used. It must be an instrument. With regard to this, the people must rely on circumstances; on the punctures, if any, on the the lips of the uterus and the body of the child. Unless you are satisfied from all the evidence that it was impossible to produce abortion *without* an instrument, I shall not be surprised if this indictment cannot be sustained unless these punctures are proved. The injuries on the vulva may prove violence, but if the punctures are not proven, they go for nothing. And here, I am sorry to say, that the case develops this strange fact, that from some cause or other—I trust not from any action on the part of our county board of supervisors—when at the outset of this case one careful and strict examination was required, four post-mortem examinations have been made.

The first was on Tuesday Dec. 23. It seems to have been directed principally to the question whether an abortion had been procured—and there it stops. Two days after, at the instance of the prisoner, Drs. Hamilton Flint, and Smith, undertook another. That was also imperfect, confessedly so. Their attention seems to be directed by some one to the chest, principally. They re-examined what had been gone over before, more or less, and there stopped. On the 10th, 11th, and 12th of January, another examination was had at the request of the District Attorney, conducted by Drs. White, Hunt, and Nichols. And I wish to say here, gentlemen, that if there were a thorough and scientific examination among the four, this is the one. Hitherto only the eye had been used, here the lens was called in to the aid of the eye. The fourth examination was made at Kraft's, on the 26th of January, by Drs. Winne, Burwell, Smith, and Hamilton. This also, so far as it went, was thorough and scientific; but the inspection with the lens was confined to the fetus, the womb was not thus examined. I am sorry to say that things have fallen from counsel on both sides to impress you with an unfavorable opinion of the different medical witnesses. If, gentlemen, you find in this evidence any such unfavorable indications, the court does not share them with you. We are unable to discover that any one of these gentlemen has conducted himself in any manner unworthy a gentleman, or that any one of them would have concealed anything calcu-

lated to injure either party, much less is there any reason to suppose that any of them have wilfully falsified the facts.

But the question of these injuries on the child is mooted. (Judge Clinton here reviewed the testimony on this point at great length, and with much care. He said that if the evidence established their existence, it was a question whether it would be reasonable for the jury to reject that evidence on the ground of difficulties inflicting them. He read Dr. Smith's evidence in full, remarking that the prosecution claimed something from it, he did not see exactly what. Having reviewed the first, second, and fourth examinations, he took up the third, made by Drs. White, Hunt, and Nichols.) It would seem strange, indeed, to me, gentlemen, if you should discredit their statement that a piece of skin was dissected out and thrown away. There is nothing tending to discredit it, and if they *did cut it out*, then the evidence of the fourth examination as to the non-finding of wounds on the child, goes for nothing.

It is for you to inquire whether you are satisfied on this evidence that a puncture existed on the womb, or on the child before its birth. If on the child can you have the least doubt as to the intent to procure abortion? If on the womb, does it corroborate this intent? The counsel for the defence claim that the wound could not be inflicted on the breast without injuring the head, and that there should have been a flow of blood on puncturing the sac. (Judge Clinton read the evidence on this point, among it that of Prof. Rochester.) With regard to this character of evidence, if the prisoner has proved an impossibility of touching the breast, ask yourselves has he proved that a flow of blood at all or in large quantity necessarily follows the attempt? Have they shown that the foetus always presents the head? How far are you permitted to oppose improbabilities against positive evidence?

5. The fifth question remains. Assuming that the first four propositions are proved, did the death of the mother or child result from the attempt. All the physicians say it would be dangerous, and also more so in women suffering under chronic disease. Here you must inquire what was the state of her health when she went to the hotel, and afterward. First did she have Bright's disease and enlarged heart. Bright's disease is not necessarily fatal, but brings on dropsy and other diseases, and may lead to abortion. Did the abortion in this case result from disease? If the puncture of the sac inevitably produces abortion, can the supposition of Bright's disease as a cause, be anything more than a surmise? Did pneumonia ever supervene and cause the death? If so, the prisoner is not guilty. Now, then,

if you are satisfied that the attempt at abortion aggravated her diseases and accelerated death, then he is guilty.

In relation to the opinions of physicians, Drs. White, Hunt, and Nichols, were the first to discover the Bright's disease, and several other unhealthy conditions. They testify that the lungs were not inflamed, that only congestion existed. Dr. Smith hardly thought the condition of the lung sufficient to cause death.

I have thus endeavored to suggest questions to your minds as to the five points necessary to be proven. I can do no more but to say to you that the case is not after all such a wonderful one as to require any departure from the ordinary responsibilities of jurymen. Divesting yourselves of all prejudice, you will sift the evidence as I have laid it before you, and bring in a sealed verdict in the morning.

Some objections were made by the counsel for the defence to portions of this charge.

A jurymen inquired if they might separate their verdict, so as to bring him in guilty of the death of the child and not of the mother, or vice versa.

Judge Clinton informed them that in either case the verdict would be the same. The death of either mother or child was sufficient for the indictment.

The next morning the jury came in with a verdict of guilty. Three days thereafter, Biegler was sentenced to confinement at hard labor in the State Prison at Auburn for the term of seven years. This is the extreme penalty of the law for the crime of manslaughter in the second degree.

Comments by the Reporter. Our object in this full history is to place the medical evidence on its proper footing before the proper judges, the medical public. Attempts have been made to place the evidence of different distinguished medical gentlemen in contradiction. We leave it far the reader to judge whether any such charge can be properly made. As we view it, on one point only was there any positive discrepancy. Drs. White, Hunt, Nichols, and Nott, all swear to the removal of a piece of skin from the body of the child at the third examination. Dr. Smith testified that at the fourth examination he did not detect the loss of any such piece, and that it could not have been removed without his missing it. We regard this, not as an intentional charge upon the veracity of other witnesses, but as a *lapsus lingue* under the excitement of his peculiar position. Aside from this one point, we consider the noble charge of Judge Clinton

as a sufficient vindication of the faculty of the Buffalo Medical College from the absurd charge that they testified against each other, or manifested partisan feeling on either side. One question will suggest itself to the mind of the reader. Amelia Murr had made her preparations for confinement, and her pregnancy was not concealed. Why did she depart from that intention? And, again, why should Dr. Biegler, a man supposed to be a skilful abortionist, leave such evident traces of clumsy violence behind him?

We do not suppose that Amelia went to the Railroad Hotel with the intention to suffer abortion. But Biegler had the strongest possible motives for the act, and when there, by persuasion and threats, he brought her to his terms, forced her to his purposes, and in the attempt to introduce an instrument upon a woman only partially consenting and struggling against him, he was compelled to inflict the wound on the os and the lacerations of the vulva. The point of the instrument once within the os, he made sure work and inflicted the punctures on the child. Such is our theory.

There is something strangely pathetic in the constancy of this poor girl to her destroyer. She was beautiful, her form the most magnificent model we ever saw. Her mind was that of a true woman, faithful through much suffering; and the unvarying secrecy which she had maintained through all their intercourse found its fitting termination in the closed lips, which, in the agony of death, gave no history of her wrongs, and sent only a thoughtful message of love to the accursed villain who had robbed her of good name, of parents, home kindred, of her unborn child, and her own existence.

ART. III.—*Tenth Annual Meeting of the American Medical Association.*

This body convened in the Representative Hall of the State Capitol, at Nashville, Tenn., on Tuesday, May 5th, at 11 o'clock, A. M.

The association was called to order by Dr. Pitcher, of Detroit.

The chairman then announced that the first business in order was the report of the Committee of Arrangements.

Dr. Winston, on behalf of that committee, took the stand, and in a few brief and pertinent remarks, welcomed to the city the delegates present.

The chairman of the Committee of Arrangements then called the roll, and the following delegates answered to their names:

Connecticut—Charles Hooker.

New Hampshire—Adoniram Smalley.

New York—James R. Wood, D. M. Reese, Geo. N. Burwell, and Alden March.

Pennsylvania—Robey Dunglison, B. F. Schenck, Casper Wistar, and P. Cassidy.

Georgia—Henry F. Campbell, C. R. Walton, N. P. Powers, A. H. Means, Joseph P. Logan, M. H. Oliver, Thomas Powell, J. Gordon Howard, R. D. Arnold, Geo. P. Padleford, and Pike Brown.

Alabama—G. M. Merriweather, W. P. Reese, A. F. Alexander, S. W. Clanton, W. H. Thornton, P. C. Winn, T. Stith Malone, W. J. Bass, G. D. Norris, J. F. Sowell, and J. W. Morris.

Tennessee—Frank A. Ramsey, James Rodger, R. O. Currey, B. B. Lanoir, J. L. C. Johnston, John M. Boyd, George R. Grant, T. A. Atchison, S. S. Mayfield, J. D. Kelley, T. L. Maddin, J. D. Winston, J. E. Manlove, G. A. J. Mayfield, Richard Owen, W. P. Jones, G. F. Jones, J. S. Burford, Jno. John P. Ford, Robert C. Foster, John H. Callendar, John H. Morton, A. H. Buchanan, J. W. Hoyte, N. C. Perkins, John B. Lindsley, C. K. Winston, Paul F. Eve, (permanent member), W. P. Moore, Milo Smith, Wallace Estill, B. W. Avent, H. H. Clayton, H. M. Whittaker, H. B. Manlove, T. M. Woodson, A. Ewing, Robert Martin, W. K. Bowling, P. S. Woodward, R. F. Evans, Thomas Lipscomb, M. Ransom, J. A. Long, John M. Watson, W. D. Haggard, John S. Park, D. B. Cliff, T. G. Kennedy, T. R. Jennings, Ira Conwell, W. H. Childress, W. A. Cheatham, J. F. Towns, J. M. Brannock, B. C. Willson, P. W. Davis.

Louisiana—S. O. Scruggs, Robert A. New, Cornelius Beard, and E. D. Fenner.

Kentucky—Samuel Arman, R. W. Gaines, J. B. Flint, J. W. Singleton, R. J. Breckenridge, S. C. Porter, W. S. Chipley, S. M. Bemisa, L. G. Ray, W. A. Atchison, E. G. Davis, and L. E. Almon.

Indiana—W. H. Byford, W. W. Hitt, Isaac Mendenhall, T. Bullard, N. Johnson, D. W. Yandell.

Illinois—J. C. H. Hobbs, A. H. Luce, James M. Steel, E. K. Crothers, T. K. Edmiston, W. A. Hillis.

Missouri—S. Pollock, E. S. Fraser, John S. Moore, C. A. Pope.

Michigan—A. B. Palmer, L. G. Robinson, Zina Pitcher, Wm. Brodie, L. H. Cobb, M. Gunn, Lewis Davenport, P. Cline, M. D. Stebbins.

Iowa—Asa Horr. Wm. Watson, D. L. McGugin, J. C. Hughes.

Ohio—Henry F. Koehne, J. M. Mosgrove, B. S. Brown, D. Ferris.

Wisconsin—Hays McKinley, J. K. Bartlett.

South Carolina—E. R. Henderson, M. S. Moore, R. W. Gibbs, and R. Z. Bailey.

Mississippi—F. B. Sanford, J. S. Cain.

New Jersey—R. M. Cooper.

Arkansas—F. G. McGavock.

The chairman of the committee then presented the names of Dr. Felix Robinson, Dr. John Shelby and Dr. John Overton, of Davidson county, with the request that they be elected permanent members of the association.

A motion was made to that effect, which prevailed, and the above-named fathers in the profession were invited to participate in the proceedings of the association.

The President here announced that the next business in order was the appointment of a committee of one from each State, to nominate suitable officers for the ensuing year.

A motion was made that the association take a recess, of fifteen minutes, for that purpose, which was carried.

Fifteen minutes having elapsed, the delegates from the different States returned, and presented the following committee:

Connecticut, Charles Hooker; New Hampshire, A. Smalley; Indiana, W. W. Hitt; Wisconsin, J. K. Bartlett; New York, James R. Woods; Michigan, A. B. Palmer; Missouri, J. O. Moore; Illinois, T. K. Edmiston; Kentucky, R. J. Breckenridge; Arkansas, F. G. McGavock; Ohio, B. S. Brown; South Carolina, R. W. Gibbs; Alabama, W. O. Reese; Mississippi, E. B. Shuford; New Jersey, R. M. Cooper; Louisiana, S. O. Scruggs; Pennsylvania, P. Cassidy; Georgia, Thomas S. Powell; Tennessee, J. B. Lindsley; Iowa, Asa Horr.

Dr. Pitcher, the President, then delivered his retiring address. We have not the space to even give a substance of his remarks; suffice it to say that it was able throughout abounding in eloquence, and containing many scientific facts which will be highly valuable to the profession.

A motion was made returning the thanks of the association for the able manner in which the retiring president had discharged his duty, and also the appointment of a committee to request his address for publication. Carried.

The Treasurer's report was read and received.

Dr. W. K. Bowling, from the Committee on Prize Essays, asked for further time to report. Granted.

Judge Catron being present, was, by motion, invited to occupy a seat by the President.

The President informed the association that Dr. F. Campbell Stewart, of N. Y., Dr. Alden March, of N. Y., Dr. Isidor Glück, of N. Y., and Dr. Pancoast, of Penn., had been appointed to represent this body in Foreign Scientific Bodies.

Under the head of Reports from Standing Committees, a letter was read from the chairman of the Committee on Medical Topography and Epidemics, Dr. J. C. Watson, of Maine, stating that he had not prepared a report, but would be prepared by the next meeting of the association.

J. F. Posey, from the same committee, from the State of Georgia, presented a report, which was received.

Communications from Peregrine Wroth, of Maryland, and W. F. Sutton, of Kentucky, on the same subject, were read and received.

The Nominating Committee returned, and presented the following officers for the ensuing year:

President—Dr. PAUL F. EVE.

Vice-presidents—Dr. R. J. Breckenridge, Kentucky; Dr. D. M. Reese, New York; Dr. William H. Byford, Indiana; Dr. Henry F. Campbell, Georgia.

The appointment of Secretaries was deferred until the association determined the next place of meeting.

The association then adjourned until 9 o'clock A. M., May 6th.

WEDNESDAY, May 6, 1857.

The minutes of yesterday were read and adopted.

The President and Vice-presidents elect were conducted to their seats. Prof. Eve, upon assuming his position, made a brief and pertinent address.

Dr. Winston read the names of additional delegates, who were admitted to seats.

Dr. Hooker apologized for the absence of his report upon Medical Topography, from the fact that he had supposed that he had three years to make it.

The Chair appointed Drs. Curry, Grant and Evans a Committee on Voluntary Contributions.

A communication was read from Dr. Mendenhall, Ohio, apologizing for no report on Medical Topography.

Dr. Winston read a communication from the agents of the Methodist Publishing House, inviting the association to inspect their establishment. Accepted.

Dr. Lindsley read an invitation from the Medical Faculty of Washington City, requesting the association to hold its meeting for 1858, in that city. Referred to the Committee on Nominations.

A resolution of thanks to ex-president Pitcher, was adopted.

Dr. Arnold, of Ga., presented an abstract of a Topographical report, from Dr. Posey, of Ga., which report was referred to the Committee on Publication.

Dr. Wood, of N. Y., presented reports from Dr. Luckley and Dr. W. Army, upon Topography of Washington Territory. Referred to the Committee on Voluntary Contributions.

The chair proceeded to call for reports from special committees, many of which were presented.

Dr. D. M. Reese, of New York, read an abstract of a report upon infant mortality. The report was referred to the Committee on Publication.

Dr. Hobbs, of Illinois, offered a resolution providing for the appointment of a Committee of Reference for all essays. After discussion it was indefinitely postponed.

A protest, signed by several members of the association, against the admission of delegates from Oglethorpe Medical College of Savannah, was read, on the grounds of irregularity in its organization.

Dr. Benson, delegate from that institution, was allowed to address the association. He explained that sickness was the principal cause of vacancies in the chairs, and stated that the protest was signed by professors in, and graduates from, a college which was a competitor of Oglethorpe.

Dr. Benson said that one of the delegates was a graduate from Tennessee. Dr. B. was considerably excited, and demanded if the gentleman from Oglethorpe denied his assertion.

Order was called, and Dr. Benson explained that he had been informed as he had stated, and if wrong, he preferred to be corrected in a gentlemanly manner.

Dr. Buchanan, of Tennessee, regretted that unpleasant feelings had arisen, and hoped the matter would be dropped.

The protest was tabled, and subsequently referred to a committee of three, upon which no professor was to be appointed.

The venerable Dr. Felix Robertson appeared, and was conducted to a seat with the President.

The convention then proceeded with the call for reports, many of which were not presented, and further time was granted.

A report upon remedies to be adopted to correct the evils of coroner's inquests, was received by mail from Dr. A. J. Simmons, of the District of Columbia. Read and referred to the Committee on Publication.

The report was accompanied with a resolution providing for the appointment of a committee of three in each State or Territory, for the purpose of memorializing their respective Legislatures for the carrying out of the remedies proposed. Adopted.

Dr. F. Hinkle, of Penn., reported upon the use of cinchona in malarious diseases. Read and referred to the Committee on Publication.

Dr. H. F. Campbell, of Georgia, reported on nervous system in febrile diseases, continued.

A report was read and referred to the Committee on Voluntary Contributions, from Dr. George Luckley, U. S. A., on the Medical Topography of Washington Territory.

Also a report from Dr. James Cooper, on the Flora of Washington and Oregon Territories. Referred to same committee.

A communication was read and received from Dr. N. S. Davis, of Illinois, on the composition and properties of milk.

Dr. Singleton, of Kentucky, offered a resolution in reference to the death of Dr. F. J. Grafton, of Mississippi.

Dr. Reynolds, a member of the association, was expelled for certifying for a quack medicine.

The following preamble and resolution in reference to the decease of our late esteemed fellow citizen, Dr. Robert M. Porter, was adopted:

"Whereas it has pleased Almighty God to remove, by death, our fellow member, Robert M. Porter, and because of his devotion to the interests of the profession of medicine and his steady support of the American Medical Association,

"Resolved, That this Association has heard with unfeigned sorrow of his decease; and that they have lost a firm and intelligent supporter, and society a benefactor and friend."

The association then adjourned.

THURSDAY, May 7.

The association met according to adjournment, and the minutes of yesterday were read and approved.

The names of additional delegates were read to the association.

The secretary read a communication from C. G. Pease, of Wisconsin, which accompanied his report on Blending and Conversion of the types of fever. Referred to Committee on Voluntary Contributions.

Dr. Currey, from the Committee on Voluntary Contributions, made a partial report upon papers referred to that committee. Accepted.

Dr. J. B. Lindsley, from the Committee on Nominations, made a report of committees, etc., for the next meeting, place of meeting, &c. The report designates Washington city as the place for the next meeting. The first part of the report was adopted separately, and the latter part, after some discussion, was also adopted.

The following gentlemen were nominated in the report as secretaries for the ensuing year: Drs. R. C. Foster and A. J. Semmes, of Washington. The latter gentleman not being present, Dr. Brodie, retiring secretary, was requested to act as secretary, *pro tem*.

Dr. C. K. Winston stated to the association that Mrs. Ex-President Polk would be pleased to receive calls from members of the association, from 4 to 6, P. M., to-day.

Dr. Pitcher offered a resolution providing the appointment of a committee of three, of which the president shall be chairman, to communicate with the Surgeon General of the Army, the Chief of the Medical Bureau of the Navy, and the Secretary of the Treasury of the United States, with a view to secure the concurrence of these departments of the Federal Government, so that the contributions to the medical topography, the vital statistics of the sanitary police of the nation, may be made tributary to the labors of this association. Adopted.

Dr. D. W. Yandell, of Kentucky, offered a resolution upon the subject of representation in the association, the gist of which was a provision requiring colleges, as a pre-requisite of representation, to require candidates for graduation honors to have attended at least two full courses of lectures, with an interval of not less than six months between them, one of which courses must have been in their institution. Dr. Yandell supported his resolution, and it was opposed by Dr. Buchanan, of Tennessee, who moved to lay it on the table.

Dr. Boling, of Georgia, offered a series of resolutions as a substitute, looking to the ruling of the subject of medical education out of the association entirely.

A discussion arose upon the resolutions somewhat protracted.

Dr. R. O. Carrey offered a series of resolutions as a substitute, providing

for a committee of five to report to the association a system of medical education.

After a prolonged discussion, the resolutions of Dr. Currey were adopted.

Dr. W. K. Bowling, from the Committee on Prize Essays, submitted a report awarding the premiums to H. F. Campbell, of Georgia, and Wm. A. Hammond, assistant surgeon U. S. Army, Fort Riley, Kansas.

Dr. Green, of Michigan, offered a resolution with a view to amend an article in the constitution Laid over.

The association accepted an invitation to visit the Medical College and the Military Department of the University of Nashville, in the afternoon.

The usual resolutions, complimentary to the citizens for their hospitality, to the reporters, the press and officers, were adopted, and the association adjourned *sine die*

ART. IV.—*On the Constitutional Treatment of Female Diseases.* By EDWARD RIGBY, M. D., etc., etc., Fellow of the Royal College of Physicians; Senior Physician to the General Lying-in-Hospital; Examiner in Midwifery at the University of London. 12mo. pp. 256. Philadelphia: Blanchard & Lea. 1857.

The author of the above volume introduces his book by stating that his "observations on the uterine and other female affections have no claim to bring a complete work on the diseases of women. I do not offer it as a class book to those who are entering the medical profession, and whose studies must necessarily be chiefly, if not entirely, devoted to preparing themselves for their different examinations; but I venture to offer it, more especially to that large portion of my professional brethren, who, being engaged in general practice, have not been able to devote their special attention to a class of affections which nevertheless must frequently come under their notice. The work is strictly *practical*; and I have endeavored throughout, as far as I could, to have this in view."

Notwithstanding the modest disclaimer in the above introduction, we apprehend that but few persons will read this little volume, without arriving at the conclusion that the writer was actuated by higher aspirations for the honors of authorship than are therein disclosed.

The book was very evidently written in a spirit of antagonism to the largely prevalent views of the day relative to the influence exerted by the uterus over the health of the female, localizing in this organ the origin of

that multitude of ills which embitter the lives of so many women. Dr. Rigby finds cause for all these difficulties elsewhere, and makes the uterus secondary in the chain of causes, or rather he scarce dignifies this organ with so important a position, but makes it the passive sufferer of ills engendered elsewhere in the system. With him everything is *constitutional*, and we cannot divest ourselves of the impression that he desires credit for originality of discovery of the importance of constitutional treatment in these diseases. Certain it is that he ignores local causation and local treatment so perfectly, that no one from what he teaches could conceive either to be of the least importance. There is an assumption in the title of the book which we dislike. The value of constitutional treatment is not denied by the most urgent advocates of local treatment. If they render less necessary a long course of administration of drugs, by recognizing and addressing their remedies to local disease, it argues but little discernment in the practitioner to preach of constitutional disease and treatment as the sum of medical knowledge upon these matters. We dislike, moreover, these attempts to block out distinct modes of practice. A treatise should contain, and should give the *treatment* of whatever form of disease may be under discussion, unless it be for the purpose of advocating some new or improved system of practice, and which, from its design, does not propose to enter into the discussion of the subject in all its bearings. That such is the character of the work before us we do not admit. *Constitutional treatment* is not new with Dr. Rigby, and he inculcates in his book but one mode of practice for all his diseases.

The etiology and pathology of this book are decidedly *hepatic*. Torpid liver, torper and derangement of the chylopoietic viscera, confined bowels, loaded intestines are the evil genii which stand guard over on the avenues to health, and are to be courted and mollified ere they will withdraw and allow the approach of more welcome visitors.

The remedial measures are in keeping with the etiology. Calomel, blue pills, and colycinth, are the remedies for all the troubles; whatever else may be used are but accessories. So prominent a place is given to mercurials that it recalls to mind the old days of the triumph and glories of the mineral, and seems really a step backward in the pathway of progress.

The deductions from such simple premises are plain. What we have been accustomed to regard as so many distinct and specific diseases are results and developments of the malign influences exerted by the derangements in the economy from the causes above specified. We will give our author the privilege of speaking for himself:

"I have, therefore, devoted what may appear an unusual amount of con-

sideration to the functional derangements, particular by those of menstruation; not only because they are affections of every day occurrence, but because I am particularly anxious their close connection with the general health, and its various conditions, especially as regards the chylipoietic viscera, should be thoroughly understood; being convinced that on a right appreciation of this, depends not only their correct diagnosis, but also the principles of their successful treatment.

"I have devoted separate chapters to the consideration of these subjects (Amenorrhœa, Dysmenorrhœa, &c.) solely in deference to a long established custom, which in former times was a necessity, when their nature and essential causes were imperfectly or erroneously understood, and which has been sanctioned by force of habit; but I feel assured that my readers will agree with me in the conviction that the time will come when those terms, as well that of leucorrhœa, will no longer designate distinct affections, but will be classed with such symptoms as pain, rigors, expectoration, &c.

"Neither do I consider that organic disease of the female generative organs is to stand as an exception to the importance of constitutional treatment; for I look upon it (to use an admirable expression of Dr. Latham's, on pulmonary consumption) as "no more than a *fragment* of a constitutional malady!"

These views pervade the whole book and of course color the descriptions of causations and modes of treatment. The reader will undoubtedly turn the most directly to the chapters on the "Inflammation of the Os and Cervix Uteri," and "Ulceration of the Os and Cervix Uteri," for the purpose of obtaining the author's views upon these two subjects, as they form prominent themes of discussion at the present time. These subjects, of so much importance, are treated in two short chapters.

We make the following quotation from the chapter treating of the first form of disease:

"In treating the subject of the inflammation of the os and cervix uteri, I must beg it to be remembered that I do not feel justified in looking upon it commonly as a primary idiopathic disease, but rather as one which is of a secondary character; or in other words, symptomatic of some cause, the presence of which has induced it. I can no more look upon inflammation of the os and cervix uteri as a primary disease, causing derangement of the general health, &c., than I could on a gouty toe, a rheumatic knee-joint, or enlarged strumous gland. Most of these uterine affections are the local manifestations of some general derangement, but which, in turn, react as causes, producing their own set of sympathies and effects."

●

Accordingly we find, that inflammation of the os and cervix uteri seldom occurs as an acute affection, but, in far the majority of cases in a subacute or chronic form; is usually associated with considerable derangement of the digestive organs, and by an atonic condition of the system generally; and is caused by whatever tends to produce or keep up uterine congestion. "Constipated bowels or torpid liver are two of the most frequent causes of this affection." He admits that inflammation of the cervix may be induced by causes of a more local character, exposure to cold, for instance, but this is more liable to produce inflammation of the ovaries, especially if acting during a catamenial period. He adds one other cause, "the dishonest application of caustic to the os uteri."

In reference to treatment, he says in view of "the amount of general derangement of health which attends a case of ordinary inflammation of the os and cervix uteri, it is highly desirable to premise some doses of alterative and laxative medicines, and thus thoroughly to clear out the bowels, &c., before proceeding to any special local remedies. A dose of blue pills for two or three successive nights, and a brisk laxative the following mornings, frequently produce such a change in the general symptoms as to materially alter the severity of the uterine affection. By restoring the liver to a healthy action, and clearing the intestines of a large quantity of feculent matter, the abdominal circulation becomes frequently relieved, and local congestion proportionably diminished. If the os uteri still remains much congested, and of the dark red color already alluded to, it is better at once to scarify the part, as being the quickest and most effective mode of relieving the patient." Leeches are recommended in cases of a more chronic character.

In cases of longer standing, and which are decidedly of a chronic character, with induration of the part, with severe pain, and uterine congestion, the confession is extorted that:

"The general treatment is by no means so simple or so easy as in the other case. The health has been so much deranged by the long continued effects of severe uterine irritation, and the strength so broken down by frequent attacks of menorrhagia, and the profuse leucorrhoea during the intervals, that it is difficult to adopt any distinct line of treatment at first starting, beyond the attempt to regulate the liver and bowels by the mildest remedies, and soothe the irritable system by gentle sedatives."

Pray, of what use is a *constitutional* course of treatment if it cannot, and is not to reach such a class of cases as these. Calomel, blue pills, and coly-cinch here fail indeed. The author very briefly points out a more rational

course of treatment of alteratives and tonics, which we should conclude would be calculated to reach the constitutional troubles, if anything could.

"Ulceration of the Os and Cervix Uteri," is treated in a still shorter manner.

He charges, "that the subject of ulceration of the os and cervix uteri has been of late years exaggerated to a remarkable extent, both as regards its supposed frequency and its effects, and presents an instance of delusion as discreditable to the candor of a practitioner as to the common sense of his patients. It has been asserted that about nine out of ten patients owe their various symptoms to this cause; and to support such an assertion, every variety of appearance which the os uteri presents, as seen through a speculum, has been pronounced to be "ulceration," although, in reality, having nothing whatever to do with it; and numerous cases have come under my own personal knowledge where caustic has been even applied to a perfectly healthy os uteri, and the patient informed that she had "ulceration!"

"Ulceration of the os and cervix uteri, not connected with malignant disease of the uterus, is in fact, a rare affection. It depends essentially upon passive congestion of the organ—as in prolapsus, and is especially observed after abortion, where the health has been much broken and the uterus has remained large and flabby, and where from general debility and want of tone, it has continued lower in the pelvis than natural. In other cases, this congested state has evidently been produced by constipation, torpid liver, and other derangements of the chylopoietic viscera."

The *general* treatment of these difficulties must be conducted on the same rules as in inflammation of the os and cervix uteri. It is somewhat amusing to observe, that after the denunciatory manner he has spoken of those practitioners, who favor the application of caustics in the treatment of these ulcerations, that he is at last compelled to prescribe them in his plan of treatment. He says, "where there is a less amount of inflammatory action, the application of solid lunar caustic instantly stops the ulcerative process, by destroying the unhealthy granulations, and covering the part with an eschar, under which a healthier process becomes established."

Again, further on he says, "If these objects have been attained, and the case be one of recent date, a single *free* application of caustic not only produces no irritation of the part, but after a short time, great relief; the darting pains, the hardness, swelling and tenderness, are much diminished and the discharge becomes more healthy."

We have referred to these two chapters at this length, for they evidently contain the gist of the book. They, however, add but little to our

stock of knowledge of these diseases. The chapter on "Inflammation of the Os and Cervix Uteri" is lacking in clearness of style. The description of the disease is confusedly written, and it is impossible at times to know whether he is describing the disease itself, or the factitious symptoms which he asserts are produced by the "dishonest" use of caustics. The same ambiguity attends upon his description of the mode of treatment. The readiness with which he imputes dishonesty of motive to the advocates of local medication, adds nothing to the pleasure of the reader.

The discussion of the subjects of "Displacements of the Uterus," "Retroversion," "Anteversion," "Prolapsus Vesicæ," "Polypus Uteri," interferes with the uniformity of the *hepatic* pathology, and these complications are treated in the usual manner, although the usual changes are rung on the necessity of regulating the functions of the chylopoietic organs.

The chapter on the "Fibrous Tumor of the Uterus" approaches nearer to the proper treatment of the subject than the sections which precedes it. After a description of the tumour, drawn principally from Mr. Paget, reference is made to the different methods proposed for getting rid of these bodies by a process of absorption.

He gives a case occurring under his own observation where a tumour disappeared under the effects of repeated leechings. He has observed beneficial results follow the continued use of the chloride of calcium. Bromide of potassium, added to an artificial preparation of Kreuznach water, he has used with apparent advantage.

Had a greater portion of the book been written with the same spirit which characterizes the treatment of this subject, a much more valuable volume would have been the result.

"Malignant Diseases of the Uterus" are treated at considerable length, without, however, much originality being displayed in their consideration. In treatment of cancer, iron is extolled, especially the sulphate. Arsenic is also favorably alluded to, and the *iodide of arsenic* preferred. Upon the benefits attending the administration of the latter compound, Dr. Walshe is quoted.

A consideration of the subjects of "Pruritus Pudendi," "Vascular Tumor of the Orifice of the Urethra," "Ovaritis," "Displacement of the Ovary," and "Ovarian Tumors," closes the book, but with very little attracting especial attention, except it be one subject, which as it seems to be the most, if not the only *original* contribution to the volume, we will notice more at length.

Under the head of "Displacements of the Ovary," the author says:

"Of late years, I have had occasion to notice a form of ovarian displace-

ment which, as far as I am aware of, has not been hitherto described, and which, on account of the intense suffering it produces, as also the character of its diagnosis and mode of its treatment, is of great practical importance. I allude to where the ovary descends into the rectovaginal pouch, and occupies a position between the rectum and the uterus, and almost justifying the term *prolapsus of the ovary*."

The displacement is characterized by intense and peculiarly sickening pain about the sacral region, extending to one or other of the groins, coming on in paroxysms of agonizing severity, and excited by the smallest pressure, as by the passages of the feces. The menstrual periods are always attended with greatly increased suffering, particularly during the early part of the discharge. The real position is detected by a careful examination by the vagina and rectum.

He speaks of seeing several cases, but the account is imperfect in not stating the number, and the comparative frequency of the accident. These are both points of interest which should not have been omitted.

In concluding our notice of this volume, we are compelled to say after a careful perusal of it, that we cannot see how it can add to the reputation of the author. It is true the treatment is sufficiently orthodox to come within the pale of regular practice, but it is not in keeping with the advancements of medical science. It lacks originality of investigation both in theory and practice, and has too much the evidence that it was written, because its author felt that it was necessary for him to write a book for the increase, or preservation of present reputation. Its partisan spirit is the only exhibition of sufficient life it presents, to relieve it from unmitigated dullness. X.

ART. IV.— *Report of Mortality in Buffalo for the month of April, 1857.*

By C. L. DARTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Aneurism,.....	2	1	1
Accident,.....	1	1	
Asphyxia Immersorum,.....	3	2	1
Abcess, Cystic, with Fractured Femur,.....	1	1	
Croup,.....	5	3	2
Cholera Morbus,.....	1	1	
Cephalitis,.....	4	2	2
Cancer of the stomach,.....	2		2
Dysentery,.....	2	1	1
Diarrhoea,.....	2		2
Dentitio,.....	1	1	
Debilitas Senilis,.....	5	2	3
Enteritis,.....	2	1	1
Eclampsia,.....	20	16	4
Febris Typhoid,.....	3	3	
" Scarlatina sequela of,.....	26	13	13
Hyperæmia Cerebralis,.....	2	1	1
" Pulmonalis,.....	5	2	3
" Puerperarum,.....	1		1
Hydrocephalus,.....	8	5	3
Hydrops,.....	1	1	
Icterus,.....	1		
Ignotus,.....	11	7	4
Intemperance,.....	2		2
Laryngitis et Tracheitis,.....	1		1
Marasmus,.....	9	5	3
Morbus Hepatis,.....	1		1
" Cordis,.....	3	2	1
Pertussis,.....	1		1
Parturitio,.....	1		1
Pneumonitis,.....	12	4	6
Peritonitis Puerperal,.....	1		1
Paralysis, occasioned by Lead,.....	1	1	
Rheumatism,.....	2	1	1
Still-born,.....	6	4	1
Scrophula,.....	1		1
Thrush,.....	1		1
Tumor,.....	1	1	
Tuberculosis Pulmonalis,.....	26	11	15
Total,.....	173		

SEXES.

Males,.....	83
Females,.....	80
Sex not given,.....	5
Total,.....	178

AGES.

Still-born, ...	6	Between 20 years and 30 years, ...	13
1 day, ...	2	" 30 " " 40 "	14
1 day and 30 days, ...	9	" 40 " " 50 "	9
Between 1 month and 6 months, ...	20	" 50 " " 60 "	6
" 6 months and 12 "	19	" 60 " " 70 "	5
" 1 year " 3 years, ...	33	" 70 " " 80 "	2
" 3 " " 5 "	13	" 80 " " 90 "	1
" 5 " " 10 "	16	" 90 " " 100 "	0
" 10 " " 20 "	9	" 100 " "	1
Total number under 10 years, ...	118	Total number over 10 years, ...	60
Ages not given, ...	0	Total, ...	178

NATIVITIES.

American, (white,)	88	Dane, ...	1
" (colored,)	3	French, ...	1
German, ...	36	Scotch, ...	2
Irish, ...	16	Swede, ...	1
English, ...	2	Country not given, ...	28
Canadian, ...	0		
Total, ...			178

Solution of Phosphoric Acid in Typhus. By Professor MAGNUS HUSS
of Stockholm.

Solution of phosphoric acid, two and a quarter ounces; decoction of marsh mallow, five ounces; syrup of marsh mallow, four ounces; mix—dose, from ten to fifteen drops every two hours. M. Huss recommends this solution in the first stage of typhus, whether it appear under the abdominal or petechial form, or under any form intermediate between these. The state of the tongue by no means contraindicates the use of this remedy, which always renders the course of the disease more favorable. The solution contains 25 per cent. of phosphoric acid.—*Presse Médicale Belge*.—*Dublin Medical Press*.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

The following statement on re-vaccination, are interesting:

Experiments in Re-vaccination.—We find in a late number of the *Zeitschrift der k. k. Gesellschaft der Aertzte zu Wien*, the following results of re-vaccination in the House of Correction, at Vienna, by Dr. F. Scholz. The trials were made on 126 men and 37 women, and the re-vaccination succeeded in 36 men and 12 women. The following were the conclusions of the writer:

1. The average proportion of successful cases was one in three.
2. The sex of the patient exercised no influence on the result.
3. The susceptibility to re-vaccination was in the inverse proportion to the number and perfection of the cicatrices left by previous vaccination.
4. This susceptibility increased in proportion to the length of time between the vaccination and the re-vaccination.
5. The increased susceptibility to the vaccine disease manifested itself both in the greater number of cases, and the greater number of perfect vesicles in each case.
6. In a few cases, variolous disease occurred 11 years after previous vaccination, and in no case did re-vaccination succeed earlier than eight years after variolous disease.
7. In no case was the normal course of revaccination accompanied by febrile symptoms, and when these did occur, the patient was either suffering from other disease, or the course of the vaccine disease was abnormal.
8. The majority of chronic diseases were not modified by re-vaccination, nor did they exercise any particular influence on the course of the vaccine vesicle.
9. In two cases accompanied by chronic spasms were the convulsions suspended during the course of the vaccine disease.—*Boston Med. Journal.*

Detection of Feigned Insanity.—Dr. J. C. Bucknill has some excellent observations on that important forensic point—the diagnosis of insanity. He considers that in the great majority of cases feigned insanity may be detected “by the part being over-acted, in outrageousness and absurdity of conduct, and by the neglect of those changes in the emotions and propensities which form the most important part of real insanity. Sometimes mania is simulated, the man howls, raves, distorts his features and his postures, grovels on the ground, or rushes about his room, and commits numberless acts of violence and destructiveness. If he has had the opportunity of observing a few cases of real insanity, and if he is a good mimic, he may succeed in inducing a person who only watches him for a few minutes to believe that he is in the presence of a case of acute mania; but if the case is watched for a few hours or days, the deception becomes apparent. No muscular endurance, and no tenacity of purpose, will enable a sane man to keep up the resemblance of acute mania; nature soon becomes exhausted, and the would be patient rests, and at length sleeps. The constant agitation, accompanied by symptoms of febrile disturbance, by rapid pulse, foul tongue, dry or harsh or clammy, pallid skin, and the long-continued sleeplessness of acute mania, cannot be successfully imitated. The state of the skin alone will frequently be enough to unmask the pretender. If this is found to be healthy in feeling, and sweating from the exertion of voluntary excitement and effort, it will afford good grounds for suspicion. If after this the patient is found to sleep soundly and composedly, there will be little doubt that the suspicion is correct.”

Speaking of chronic mania, Dr. Bucknill observes that it may be imitated; and that if this should be done by an accurate observer of its phenomena, who also happens to be an excellent mimic, it cannot be denied that he may deceive the most skilful alienist. Fortunately for the credit of psychologists, insanity is rarely feigned, except by ignorant and vulgar persons, who are quite unable to construct and act out a consistent system of disordered mind. It must be remembered that all the features of every case of insanity form a consistent whole, which requires as much intelligence to conceive and imitate as it does to conceive and imitate any dramatic character. The idea which the vulgar have of madness is of quite a different kind. They represent it as a monster, half man, half beast; the emotions they represent unchanged and human; the intellectual functions they represent entirely perverted, grovelling, and bestial. They think that madness utterly alters the character of a man's perceptions and destroys his judgment, so that he not only ploughs the shore and sows salt for seed, but that he cannot recognise his own son, or avoid the destruction of his life. In more homely cases it will be found that men feigning insanity pretend that they cannot read or write, or count ten correctly, or tell the day of the week, or how many children they have; they answer every question wrongly, which a real lunatic who could be made to understand the question and to answer it at all would certainly answer right. In illustration of these facts, he subjoins the following case of simulated insanity reported by Dr. Snell, in the ‘*Allgemeine Zeitschrift für Psychiatrie*,’ December, 1855: “In the House of Correction at Ebernach, a man attempted for some years to escape punishment by imitating insanity. He would not work, he danced round his cell, sang unconnected words and melodies, and made a peculiar booming sound. When any one went into his cell, he put on a forced stupid expression, he

glanced at people sideways, but generally fixed his look on the floor or on the wall. To questions he gave either no answers or altogether wrong; for instance, to the question, How many days were there in the week? he answered, Ten. He would not recognize the people whom he constantly saw; he said he had never seen me, and did not know me. When I asked him if he knew who I was, he said a man. I placed before him a keeper with whom he daily had intercourse, and asked him if he knew who this man was; he said at first he did not know, and then he said he believed he was a soldier. There could be no doubt there was deception in this case. The unmasked deceiver tried to play his part for some time, and then gave it up.

In the detection of feigned insanity, much stress has been laid by writers upon the suddenness of the attack, as distinguishing it from real insanity, the invasion of which is gradual. This point of diagnosis must be accepted, however, with much caution. Dr. Bucknill has known real cases of mania manifest themselves with the utmost suddenness; he has known patients who went to bed apparently in good health, awake in a state of mania; he has known patients become suddenly maniacal under the influence of exciting and denunciatory preaching, and during other conditions of intense temporary excitement. Doubtless, in all these the brain was previously prepared for the sudden explosion, but the symptoms of latent disease had not been of a nature to attract any observation, and therefore in a diagnostic point of view the sudden outburst of real insanity must be accepted as possible.—*Asylum Journal*, January, 1857.

Two Cases of Thoracentesis, performed for Acute and very considerable Pleuritic Effusion and followed by Recovery. (L'Union Medicale, tome x, No. 147, 148.)

The cases occurred at the Hôpital St. Antoine, under the care of M. Aran. The patients were men respectively of the ages of twenty-six and thirty-nine years. In the first, the pleurisy affected the left side, and the effusion was so considerable as to force the heart above an inch (three centim.) beyond the right margin of the sternum; in the second, the right side was affected, and the heart was pushed over to the left, so that the heart-dulness only commenced at the left edge of the sternum. The dislocation of the heart forms one of the chief sources of the danger accompanying pleuritic effusion, and may therefore be regarded as an argument in favor of paracentesis. Paracentesis was accomplished in the former case a few days after the patient's admission to the hospital, when he had been about four weeks ill. One thousand two hundred grammes (above twenty-six ounces) were evacuated; the immediate relief was great, and an entire recovery followed, so that he was discharged, cured, three weeks after. In the second case, the operation was performed four weeks after the commencement of the illness, and a week after the patient's admission. The amount of fluid evacuated was 2560 grammes (about fifty-five ounces). A fortnight after, the patient is reported to be doing perfectly well, being retained in the hospital simply as a matter of precaution.

In neither of the cases was there much fever on the day on which the
VOL. XIII., NO. 1.—4.

puncture was made; the pulse was eighty-four in the first, sixty in the second patient; the former presented twenty-four, the latter twenty, respirations in the minute. They had some appetite, and probably neither patient considered himself dangerously ill; still, the extent of the effusion left no doubt that their malady was a very serious one. This recovery was the most rapid and complete, as regards the expansion of the compressed lung, in the second case—still, in both, the lung that had been affected, was restored nearly to the normal condition. The first at his discharge is reported to have retained only a slight dulness, with a somewhat feeble respiratory murmur on the left side; while the second, eight days after the operation, presented nothing but a slight diminution of the respiratory murmur at a circumscribed spot at the lower and outer part of the affected side.

On the Diagnostic Value of the Symptoms commonly regarded as Indicative of Pulmonary Cavities. By DR. N. FRIEDREICH. (Verhoddlungen der Physikalisch. Medicinischer Gesellschaft in Wurzburg. Siebenter Band, Heft 1.)

The cracked-pot sound, the tympanitic percussion-sound, the amphoric and metallic respiratory sounds, are in this paper examined in relation to the diagnosis of pulmonary cavities. We recently drew attention to Professor Bennett's observations on the occurrence of the cracked-pot sound in various conditions unconnected with cavities. Dr. Cockle has also * shown that it may occur in cases of simple bronchitis. Dr. Friedreich gives three cases of pleurisy in which this sound was met with. In the first (a man, aged twenty-two) it occurred in the left infra-clavicular region, at the time when the effusion on the same side was receding, and it lasted until its complete absorption. In the second (a man, aged twenty-two), the sound occurred from the commencement of the affection, and whether the nose and mouth were open or closed, in the left infra-clavicular space, as far as the third rib, to which the pleuritic effusion reached. It disappeared before any change in the exudation was perceived. In the third case (a man, aged twenty-three), the *bruit de pot fêlé* was produced, the mouth and nose being open, at the upper left side, down to the third rib, at which point the effusion commenced. The patient was still under observation when the paper was written. With regard to the occurrence of the sound in healthy subjects, Dr. Friedreich has failed to discover it in the adult, but on examining forty-six children under fourteen years of age, he met with it twenty-six times—fourteen times audible on both sides anteriorly, but only in five equally loud—in the other cases, generally louder on the left than the right side, and only twice louder on the right than the left. In explaining the production of the cracked-pot sound, Dr. Friedreich opposes the theory that it is due to air being forcibly expelled through the glottis, because on applying the stethoscope to the larynx, while another person produces the sound, no indication of its formation at the glottis is obtained. In bronchitis and

* Association Medical Journal, July, 1856.

early infancy he believes the production of the sound to be due to the compression of the smaller bronchi during the act of percussion. He adopts Skoda's theory of its production in phthisis, while in pleurisy he attributes it to compression of the pulmonary tissue by the exudation, and the forcible expulsion through the smaller bronchi of the air contained in them, when percussion is employed.

On the Beneficial Effects upon Intractable Strictures of opening the Urethra behind them.—The benefits of the plan of treating bad strictures by procuring a free escape for the urine behind the strictured tract has been well illustrated by a case now under the care of Mr. Cock, in Guy's Hospital. The end referred to may be secured either by puncture of the bladder, or by opening the membranous urethra, preference for one or the other mode being often optional with the surgeon. Of course, when no retention has occurred, and the bladder is kept empty, puncture of it can be resorted to; and in this class of cases, as well as those in which the perineum is the seat either of abscesses or sinuses, the perineal operation is to be preferred. The clinical fact on which the practice is founded is, the strictures, when once relieved of the irritation of the urine passing over them, spontaneously soften down and dilate. The plan, although much ridiculed by some, is a great favorite with some of our most practical hospital surgeons, among whom we may mention Mr. Cock, Mr. Wormald, and Mr. Simon. Mr. Wormald terms it giving "the diseased urethra a holiday," and is very warm in his commendations. Mr. Cock and Mr. Simon we have often seen resort to it. In cases of impassable stricture, its advocates regard it as far safer practice than the attempt to cut through the stricture without a guide, a procedure acknowledged to be one of much difficulty and uncertainty. Mr. Cock's case referred to, may be briefly outlined as follows: A man in fair health, aged 30, had been for five years the subject of a long and most intractable stricture. His penis, &c., at the time of admission, was seamed with scars of incisions made for the relief of extravasation, and he stated that he had repeatedly suffered attacks of retention. The urine merely dribbled away, and there were numerous fistulæ in the perineum. After some weeks' patient treatment, Mr. Cock still found himself unable to pass the smallest instrument. The mass of induration around the urethra was very large. The man was now put under chloroform, and with a straight-bladed knife Mr. Cock opened the urethra by a single plunge,* just anterior to the prostrate. No staff was in the urethra at the time, and no attempt

* The term "plunge" may possibly be understood. All that it is intended to imply is, that the knife should be pushed steadily on in the median line; until the urethra is reached, and that there should be no side cutting. The forefinger of the left hand should be in the rectum, just touching the anterior edge of the prostate, and should serve in a certain sense as a guide to the knife. The making but one cut with the knife secures that the wound shall be of a conical shape, its apex being the urethra. The circumstance that the urethra is dilated behind the stricture much facilitates the finding of it. The careful keeping the knife in the median line is the one important point in the operation.

whatever was made to divide the stricture. A female catheter was passed by the wound into the bladder and retained a few days. No urine whatever flowed by the penis for upwards of a fortnight, and at the end of this time a No. 5 catheter was pretty readily introduced through the stricture. No case could better prove the principle that strictures, when relieved from irritation, do really soften and spontaneously dilate. There is, indeed, whatever some may have held, nothing singular in the circumstance that they should do so. In cases of Amussat's operation, performed for stricture of the rectum, the latter has been known to dilate afterwards very considerably, and the effect of tracheotomy in relieving chronic laryngeal disease, is well known to all surgeons.—*Med. Times and Gazette*, Dec. 24, 1856.

On a Simple Mode of Reducing a Dislocated Elbow.

By M. BIDARD, of Arras.

In a recent communication to the Société de Chirurgie de Paris, M. Bidard relates a case in which a dislocated elbow was reduced in a very simple manner, after the ordinary means had failed. A child, aged 13, had dislocated his elbow, and the dislocation had been reduced in the ordinary way. A month later the elbow was again dislocated. On this occasion the child said nothing about the accident, and five weeks passed before the mischief was discovered, and the attempts at reduction repeated. These attempts failed. It then occurred to Mr. Bidard to persuade the child to swing himself by both hands from a cross beam of wood, and to allow his hands to be held in this position by another person when he became tired. These swingings were continued for fifteen or twenty minutes at a time, and repeated every morning and evening; and the result was that the displacement had entirely disappeared on the seventh day. It appears from the account, that the displacement diminished progressing between the first and ninth suspension; and that the rest of the deformity disappeared suddenly during the fourteenth suspension.

This method, as Mr. Larrey observed afterwards, possesses some analogy to that of the *door*, as formerly practiced by some surgeons, but with this difference, that the reduction is effected gradually in this case and suddenly in that.

As to the rest we are disposed to think there need have been no difficulty if the chloroform had been employed; for, unquestionably, dislocations of much older standing are easily reducible with the help of this agent.—*Gaz. Hebdom. de Méd. et Chir.*

On Edema Glottidis, resulting from Typhus Fever. By THOMAS ADDIS EMMET, M. D. (*American Journal of the Medical Sciences*, July, 1856.

Dr. Emmet draws attention to two forms in which cedema glottidis occurs as a secondary affection of typhus, either as a result of a reactive ulceration of the mucous membrane of the air passages, in consequence of typhous

deposit, or as a result of the debilitated condition of the patient alone remaining after the subsidence of the primary disease; in the former variety the infiltration takes place slowly; in the latter, with great rapidity, so as to cause almost instantaneous death. Dr. Emmet supports his views by cases. He is of opinion that cedema glottidis is more frequently the cause of the fatal issue of diseases than is commonly supposed. With regard to the performance of tracheotomy or laryngotomy, it is not advisable at all in the cases of laryngo-typhus, since in every fatal case of this affection, bronchitis was found to co-exist; a more favorable issue may be expected to follow where it is performed for simple cedema. The relative frequency of cedema of the glottis as a sequel of typhus, may be gathered from the fact, that out of 1931 cases of typhus, 23 presented the laryngo-typhous, 7 the simple form of cedema glottidis.

EDITORIAL DEPARTMENT.

A New Volume.—With this number we commence volume xiii of our Journal. We look forward to a better volume than any of its predecessors, and assure our friends that no effort shall be wanting on our part to secure an interesting variety of original matter. As heretofore, also, we shall continue to speak our honest sentiments on matters of medical policy, trusting to the good sense of our readers to sustain us in a course so consonant with our feelings. We are fairly settled down into our shoes as journalists; have lost the sensitiveness which a new comer in the editorial ranks must always feel to adverse comment, while at the same time we have grown by sad experience more cautious as to *how* we tell the truth. We mean to speak it always in some shape. We no longer love a dispute for the excitement of it, but we have grown pachydermatous under attack. There is a world of humbug, quackery and false pretention in the profession as it now stands, which for our own good needs exposure and abatement. But we would always bear in mind that the good predominates, and that any attack upon that which is false should spare those noble elements which make us proud of our position as an humble member in the ranks of legitimate medicine.

Syphilization.—The medical reader will remember that a few years since the startling announcement was made of a discovery in France, of a means of controlling the ravages of syphilis by a process of inoculation—the disease itself was not only to be treated and cured by this method when present, but the system was to be rendered invulnerable to all subsequent attacks by the same operation, in the same manner as vaccination protects the system against the contagion of small-pox.

The proposition was a bold one, and while it challenged attention, the utmost faith in the probable triumphs of science and skill over the domains of disease, could scarce give credence to the claims of this discovery. The mind revolted at the proposition,—there was the danger, and the probability of permanently contaminating the system with one of the most horrid diseases with which humanity is cursed; and every sentiment of morality was shocked as it saw in this pretended discovery a full license given to an indulgence in the grossest licentiousness, unchecked by a single fear which ordinary caution now imposes. In France itself the subject met strong opponents, and the authority of Ricord's name was brought to bear in opposition to it. It required bold men to urge it, and in the light of the melancholy results of some unsuccessful attempts to verify the truth of the claims put forth, the whole subject seemed very speedily to pass from notice and attention, at least so far as this country, England and France were concerned. But such seems not to have been its fate elsewhere. Upon the continent of Europe, in various places, the subject has attracted the attention of earnest minds bold enough to pursue the inquiry, and has been put to the test of experience, and the results are gradually being disclosed to the world. These experiments have, from the moment of the first announcement of the discovery, been perseveringly prosecuted in Norway, in Sweden, in Turin and elsewhere. Professor Boeck in Christiana, Danielson in Bergen, Carlsson in Stockholm, and Sperino in Turin, have for some years, been engaged in a series of careful experiments and observations made to test the truth of the claims set up by the originator of this practice.

The attention of the English reader will be renewedly called to this matter, by a notice in the April number of the *British and Foreign Medico-Chirurgical Review* of the present year, of two volumes recently published by Prof. Wm. Boeck, Professor of Medicine in the University of Norway, detailing the results of his experiments in syphilization up to the summer of 1856. These experiments have been carried on in a large hospital, in the presence of intelligent colleagues, and of a large body of students; and with

so many witnesses to the truthfulness of the statements but little room is left for doubts as to their correctness. The character of the author seems, moreover, to be above suspicion.

The article in the *Review* contains a historical sketch of the origin and progress of syphilization, and we deem the subject one of sufficient importance to warrant us in giving an epitome of the said article.

We know of no other source from whence to derive the information there given, and from present appearances the profession will be compelled to meet this question despite of any considerations of morality which may surround it.

Auzias Turenne, a young French physician, was the originator of this novel practice. As early as the year 1844, it seems that Turenne commenced a series of experiments in order to test the truth of the doctrines of John Hunter, of the non-communicability of syphilis to the lower animals. After many experiments and several failures, he succeeded in producing in monkeys inoculated with chancre matter, a disease which had all the characteristics of true chancre. This was transferred to rabbits, cats and horses, and from them was returned by inoculation to the human subject, the first trials in this regard being made by Dr. Robert Wetz, of Würzburg, on his own person.

While thus engaged in researches on the transmission of syphilis to animals, Turenne became aware of the curious fact, that each succeeding chancre produced by inoculation, became less and less in each animal, until at length a period arrived when inoculation apparently lost its power, and no chancres, or sores of any kind, followed the application of the venereal virus. From these facts he drew the inference, that by prolonged inoculation with the syphilitic poison, a constitutional state, or diathesis, was at length produced, in which the system was no longer capable of being affected by syphilis. This condition he terms "syphilization," and upon this asserted discovery all the subsequent experiments and peculiar mode of treatment are based.

Turenne's doctrines were laid before the French Academy of Medicine, November 18, 1850, and as was to be expected, met with the most vehement opposition. He had only recently commenced his experiments on syphilization in the human subject, and he had, therefore, few or no data for the support of his opinions, and he not only proposed to employ syphilization for the cure of primary and secondary syphilis, but suggested its use as a prophylactic against the contagion of the disease in persons uncontaminated by the poison. The discussion mainly turned upon the latter proposition, and the indignation of his opponents was unbounded at the audacity and

immorality of such a proposal. A few were found to urge a careful investigation of the subject, but the weight of the opposition was too great for them to contend against, and the proposals of Turenne were unequivocally condemned. In England the subject excited but little interest, being casually noticed in some few of the medical journals.

While the subject was thus disposed of in Paris, the question was made one of careful study by Sperino, of the city of Turin, a physician attached to the Veneral Hospital of that place. He made his first report on the subject to the Medico-Chirurgical Academy of Turin, on the 23d of May, 1851. In this report he gives the full details of fifty-two cases thus treated by him at the hospital. The subjects were all prostitutes, and all suffering from aggravated forms of primary or secondary syphilis. The results were, that after frequent and repeated inoculation of the virus, the contagious matter ceased to produce any effect whatever, and contemporaneously with the establishment of this epoch all former ulcers had healed, and buboes, enlargement of bones, cutaneous stains or blotches, had either disappeared altogether, or were rapidly going away.

Sperino's observations were confirmed by similar results obtained by Dr. Gamberini, at Bologna, and by Gulligo, at Florence. In 1853, Sperino published a detailed account of 96 cases of syphilization, in a bulky volume of 903 pages.

Of these 96 cases, 53 were of primary syphilis, and 43 of constitutional disease. Fifty of the primary cases were cured, 2 failed, and 1 was not treated by syphilization alone.

Of the 43 cases of constitutional disease, 26 were treated by syphilization alone, and 17 by this method in conjunction with mercury or iodine.

Of the 26 cases treated by syphilization, 25 were said to have been cured.

In only 2 cases of primary disease did any constitutional symptoms appear, and those symptoms rapidly yielded under a continuance of the syphilization. No relapse has yet taken place in any case, and many of these were of very severe character, and were not likely to heal spontaneously.

In confirmation of all this testimony to the validity of Turenne's claims, we have the published reports of Dr. Boeck, of the University of Norway. The same plan of treatment is now pursued by Dr. Danielson, in the hospital at Bergen, and he endorses the results obtained by Dr. Boeck.

Dr. Boeck holds, that as a prophylactic syphilization is *unjustifiable*, and says that even its discoverer now holds this opinion. Syphilization, he says, can therefore only be adopted where venereal disease already exists; but even here, in his opinion, it is far from being applicable to every case. He

believes it to be contra-indicated in the primary form. In ordinary non-indurated chancres, he would not practice syphilization, for there is a strong probability that in such cases, the patient will escape the constitutional affection altogether. He does not, however, subscribe implicitly to Ricord's opinion, that a non-indurated chancre can never give rise to constitutional symptoms. He seems disposed to wait until constitutional symptoms declare themselves before he subjects his patients to a course of treatment which is necessarily long and painful.

The conclusions drawn by Dr. Boeck, from the eighty-four cases of syphilization which he had treated up to March, 1856, are as follows:

I. That in all cases, without exception, immunity to the venereal virus is obtained, sooner or later, by inoculation of this poison.

II. That the symptoms of syphilis present at the commencement of syphilization, disappear during the employment of this mode of treatment.

III. That the general health does not suffer in the least from syphilization—on the contrary, if the patient has been in weak health before inoculation, he most materially improves in strength and appearance during the process.

Dr. Boeck says, that the time required to produce immunity depends not only on the variable strength of the virus—upon the rapidity or otherwise with which the inoculations succeed each other, and upon the number of chancres—but also upon the idiosyncrasy of the individual. In one case immunity was obtained only after seventy-one chancres, but he regards the virus employed on this occasion as remarkably weak. He has been led to believe that great variety exists in the strength of the venereal virus, and his observations go to prove that the virulence of the poison varies in different countries. He thinks that the virulence of syphilis is rapidly diminishing in Norway. He has found the greatest difficulty in obtaining fresh chancre matter of sufficient power; and he has been compelled to depend upon matter taken from chancres incurred in Germany or in England.

In reply to the question, how long the immunity to the virus thus obtained lasts, whether like the result of vaccination for small-pox, it lasts for life, he is unable to answer. He inclines to the belief that the protection is effectual and permanent. He seems extremely cautious, and has not felt justified in putting those healed by syphilization to the proof of inoculation, for fear the treatment had returned the system back to its original condition of health, and freedom from contamination, and that an inoculation *after* the cure, *might again* produce constitutional symptoms.

The previous use of mercury, seems to have complicated the results of the treatment by syphilization. In some cases the cure was impossible without the use of iodine, which he regards as essentially an anti-mercurial. He regards the patient when treated by syphilization alone, as much less liable to relapses than when treated by mercurials.

Various methods of inoculating the venereal virus have been adopted by the advocates of this system. Turenne at first kept up a succession of single chancres; while Sperino made three or four separate inoculations at once, and repeated these two or three times in the week. After having in this way reached the number of twenty-four or thirty inoculations in all, he found that the chancres last produced were exceedingly small, and he then diminished the intervals, and made more inoculations at each sitting. He found that the first chancres were deeper, larger, and more inflamed than those which succeeded them; and that by diminishing the intervals and increasing the number of inoculations, the earliest chancres visibly diminished, and were less painful and inflamed. To test this still further, Sperino ventured upon as many as sixty inoculations at once upon the same individual; but the result obtained was, that *immunity* to further inoculation set in before the syphilitic symptoms were cured, and relapses of the disease frequently ensued. He, therefore, returned to his former plan, and now inoculates for six or ten chancres at each sitting. While these chancres are progressing, it is neither necessary nor advisable to inoculate afresh, nor should this be done until the former chancres be developed. Should the chancres be developed too freely, and threaten to produce active inflammation, or to extend as phagedænic sores, he checks their progress by inoculating afresh at shorter intervals.

The practice of Dr. Boeck differs very little from that of Sperino. At first, afraid of producing too serious an impression upon the system, Dr. Boeck inoculated for two chancres only every six days, selecting that period of time because he found from experience that it required about five days to produce induration in a chancre; he does not, however, regard this latter circumstance absolutely essential. Subsequently he has shortened his intervals to three days, and increased the number of inoculations to eight or ten. Sperino places his punctures on the lower part of the abdomen, while Dr. Boeck prefers inoculating the arms and thighs.

We have given as fully as our limits will permit, the pith of the article contained in the *Review*. At the risk of a charge of plagiarism we have employed its language when convenient. The reports of cases given, and

the arguments used to enforce the truth of assumed positions we are compelled to omit.

It would seem that this subject is now fully before the profession, and there is no evading the questions presented in its consideration. With the physician the subject is one of therapeutics and not of morals. The claims of the discover are true or false. This point can be established by experiment only. If true, the value of the discovery as a safe and desirable treatment, is next to be established by experience, and by that alone. It would seem at least a matter of prudence to withhold any further denunciations, and to cease all efforts to cover the subject under the weight of great names arrayed in opposition.

If further experience establishes all that is claimed for syphilization, the discovery is one of the most remarkable in the history of medicine, and it will assume a place next in rank with the unexplained mysteries of vaccination.

J. M. K.

Typhoid vs. Remittent Fevers.—Dr. Claiborne, of Petersburg, Va., in the *Stethoscope*, asserts that many Virginian physicians are too hasty in acknowledging the prevalence of typhoid fever as an endemic, in that region. He still considers the form of disease under question as a remittent fever with low tendencies. We are inclined to regard this as only a repetition of the experience of the north-west. Here in Buffalo, typhoid fever was entirely unknown to the older physicians, but within a few years it has displaced the remittent form almost entirely. It is not at all surprising that in the transition stage of the epidemic constitution, the question of pathology should be gravely mooted by intelligent men. Dr. Claiborne puts out an anchor to windward in the following closing paragraphs of his interesting article:

“We do not wish to be understood as affirming that typhoid fever *never* occurs in this city or in this section of the state. On the contrary, we think we have seen undoubted cases of it. More. We have sometimes thought that there were intimations of the possibility of our malarious fevers being entirely replaced by it, in view of the fact that improvements in drainage, sewerage, &c., are gradually diminishing the causes of the former, while the increase of population, even to redundancy, in our cities, furnishes material for the enlarged development of the causes of the latter. But in none of the endemics of remittent fever, slow fever, continued fever, &c., as it is

called, whether in town or country, which have come under our observation, have we been persuaded that the disease was typhoid fever proper. I have been assured by some excellent physicians of those sections of our state where the *slow fever* is almost yearly endemic, and occasionally makes devastation upon a plantation, and where it is regarded as contagious or infectious, that the disease was *undoubtedly* typhoid fever. But these same gentlemen with practical good sense have also assured me that quinine was the treatment—that they often cut short their cases with it, and that they rarely lost a patient if called in time.

“Now, while theory and experience both unite in declaring typhoid fever to be *incurable even by quinine and calomel*, these gentlemen must excuse us if we urge that they have applied to their disease a misnomer. And though we confess that it were scarcely wise to divert their attention by a new name, when they already combat their enemy so skillfully and so faithfully, yet as we advise no change in the armory, we hope they will allow us to insist on accuracy of nomenclature as essentially important to any intelligible record of the character and habits of disease.”

The argument from treatment is always unsafe. It will not do to say that a disease is not typhoid fever because quinine cures it. When the change in the epidemic constitution of Virginia, which Dr. Claiborne predicts, has fairly taken place, he may find himself using quinine very freely in typhoid fever, and placing his main reliance upon it. We say this because his article is a very sensible and straight-forward production, and we believe that, as he suggests to others, he will not himself be governed by a name in the treatment of disease.

More Tinkering.—At the last session of the American Medical Association, at Nashville, pending a discussion of the subject of medical education, Dr. Curry offered the following resolutions:

Whereas, The subject of Medical Education has been committed at each annual session to standing committees, and various suggestions have been proposed which the Association has adopted, and recommended to private instructors and to the medical colleges,

Resolved, That a committee of five be appointed by the committee on nominations, as a special committee, to be composed of members who are in no respect connected with any medical school, to devise a *System of Medi-*

cal Instruction, to be presented for the consideration of this Association at its annual session in 1858.

Resolved, That the proposed system shall set forth a uniform basis upon which our medical institutions shall be organized as well as have reference to the best mode of securing the preparatory medical instruction to the student, and that consequently the legitimate subjects to be embraced in said system will include Primary Medical Schools, the number of Professorships in Medical Colleges, the length and number of terms during the year, the requisite qualifications for graduation, and such other subjects of a general character as to give uniformity to our medical system, and preserve harmony and friendly intercourse in the ranks of the profession.

Resolved, That, upon the adoption of the proposed system by the association, all institutions which may conform to it shall be entitled to representation at the annual session of this association, and none others.

These resolutions passed, and the following committee were named to carry them out:

James R. Wood, of New York; George R. Grant, Memphis, Tenn.; John Watson, New York; C. B. Nottingham, Macon, Ga.; Rene La Roche, Philadelphia.

What all this may result in is past our power of prophecy. We would like to see stringent rules enacted, requiring a high standard for the degree; and requiring, also, on the part of the schools, certain requisite advantages in the way of clinical opportunity, number of faculty and length of term. We would willingly stand or fall by such a system, but so long as the great schools of New York and Philadelphia hang back, let no man attempt to dragoon the provincial schools into a movement in which they are expected to ruin themselves for the benefit, not of the profession, but of these same metropolitan schools.

We honor those schools, and have no enmities with them, but let it be understood that in these much talked of reformatory movements they must take the lead. They have wealth and all the advantages which are attractive to students; they can afford to lead off. We of the provinces will follow in this matter, we choose to be secondary, inasmuch as what little experience we have had in a similar movement only resulted in benefit to them and injury to ourselves. But we know that the provincial schools will not flinch, and the Philadelphia and New York centres once taking a firm step for reform, will find us along side them. Let us see.

A Hard Hit.—It will be recollected that the late president of the American Medical Association had, a few years since, but a very small opinion of the uses of clinical instruction. He has recently changed, to some extent, his views on that subject, and announces clinical instruction at St. Mary's Hospital, Detroit, to which no student can be admitted unless he has attended one course of lectures at Ann Arbor. The idea of a clinical department located only forty miles from the school to which it is attached is novel, to say the least. Commenting thereon, the editor of the Medical Independent thus discourses:

"Here, then, is the Medical Department of the Michigan University, 'revised and improved' by the Board of Regents. To us it looks very much like 'the play of Hamlet,' with '*Hamlet*' left out, and before the last *rendering* is complete we venture to predict that it will be more appropriately named *the Regents folly*—in one act!

"But who are to represent the most practical department in this clinical teaching? Why are the 'Professors of Theory and Practice,' and the 'Professor of Surgery,' left out of the programme? Both are residents of the city, and both are zealous and competent teachers. Why are these departments represented by an *emeritus* professor, assisted by the Professor of Materia Medica? This is the way by which the Board of Regents propose to supply this '*important want of the medical neophyte*;' a professor in the institution is to be permitted to discharge his duties *by proxy*. May not the Professor of Surgery or Theory and Practice, with as much propriety associate with himself some *proxy*, from whose zeal and ability he can derive important aid in giving his winter course at Ann Arbor?

"If such are the only inducements offered by this 'appurtenance' to the University, is it reasonable to suppose that in addition to the six months of laborious study through the *winter course*, they will come here, into the city, during the *heat of summer*, to complete the curriculum?

"Can the Medical Department of the *Michigan University*, with such comparatively meagre clinical advantages, hope to compete successfully with schools wherein the *theoretical is associated and blended with the practical*? The great utility of clinical instruction consists chiefly in the fact, that it is *made to illustrate principles*, to familiarize the student with the physiognomy, or sensible aspects of disease, as well as its pathology, and the *modus operandi* of remedies.

"A few years since branches of the University were established in different parts of the State, the constant nursing of which crippled the University fund, and involved the institution in financial embarrassment. We have reason to fear that this last experiment—this *Branch of the Medical Department*—has been established upon the same short-sighted policy, the same want of practical knowledge and appreciation of the real object to be accomplished.

"There is one feature in the announcement of this summer arrangement which may surprise some of our readers, and though we may incur the risk of being considered invidious, its import gives additional strength to our

views respecting this—at best—doubtful experiment of the Regents, and, therefore, merits a passing notice. It is very well known that the *emeritus* Professor who has received the appointment of 'clinical instructor,' has held *peculiar* views respecting the *utility* of hospital advantages; taking the ground that '*clinical observations may be most successfully and profitably made under the supervision and direction of a private preceptor,*' and that '*a thorough knowledge of the principles and elements of the science of medicine should precede any attempt at their practical application.*'

"Now he speaks of these proffered advantages at St. Mary's Hospital, as an '*important want of the medical neophyte.*'"

"What has so completely metamorphosed his published opinions on this subject?"

"Why the Board of Regents should have chosen a man who has long entertained and published opinions entirely opposed to hospital instruction, is a question which time will answer. R."

We have received from Dr. John G. Orton, of Binghampton, an excellently devised book of record, for tabulating the statistics of medical practice. It is superior by far to any other, and offers a very convenient form for a history of the diseases seen in practice. It is designed by Dr. Orton, as one of the committees of the State Society on Medical Statistics, and we presume that an application to him would secure a copy at slight cost. Our impracticable friend and neighbor, Dr. Congar, made a similar attempt last year, but Dr. Orton's will be found much more ready, and better adapted to its purpose. It would be but little labor for the physician, using the "Physicians Diary," published by Messrs. Phinney & Co., of this city, to tabulate from it at the end of the month a very satisfactory record on one of the tables designed by Dr. Orton. If all our many physicians would do so, great good would be gained by the collection of a valuable mass of statistics.

New York Journal of Medicine.—A change in the editorial department of this journal is announced. The senior editor, Dr. S. S. Purple, has resigned his charge, and as Dr. Bulkley's connection was intended to be but temporary, Dr. Stephen Smith remains sole editor. Under his able administration the Journal will doubtless maintain the high rank it has hitherto held in medical periodical literature. We rejoice to learn that "circumstances of a favorable character, relating to his duties as a private practitioner," have required Dr. Purple to withdraw from the editorial chair.—*Boston Medical & Surgical Journal.*

Sir Charles Locock.—Her Majesty, Queen Victoria, has been graciously pleased to bestow the honors of Knighthood on her chief accoucheur, Dr. Locock. Mr. Punch suggests, however, that this distinguished gentleman deserved, after his arduous duties, to have been elevated to the peerage under the title of Lord Deliver us!

Some one down east, who dare not give his name, sends us the following Mrs. Partington. The old lady attempted to repeat the homœopathic precept, "*Similia Similibus Curantur.*" She rendered it "*Simia simiis curantur.*"

We may as well make our little couplet of jokes a triplet, by calling the attention of our readers to the fact that in the whole range of botany there is no flower which so much resembles *diabetes mellitus* as the *everlasting sweet pea*.

Medical Miscellany.—The Association of Medical Superintendents of Institutions for the Insane, which held its annual meeting in New York, last week, adjourned on Friday evening.

The sum of \$50,000 has been appropriated by the Massachusetts Legislature, to finish the buildings of the third State Insane Asylum, at Northampton.

The number of graduates at the University of Pennsylvania, the present season, was 149.

A State Medical Society has been formed in Mississippi, and at its first meeting recently, Dr. W. Gadbury was chosen President.

Dr. C. V. Blaney has been appointed Visiting Physician to the U. S. Marine Hospital, at Chicago, and Dr. J. C. Nott to the Marine Hospital at Mobile.

Dr. Edward Banks, of Clinton, Miss., has presented to the Museum of the New Orleans School of Medicine, an interesting specimen, consisting of about 14 inches of the lower part of the small intestine of a child, so completely *stuffed* with large worms, as to entirely obstruct the canal. The gut is absolutely distended, and the blood-vessels are in the highest state of congestion.—*Boston Med. & Surg. Journal.*

American Pharmaceutical Association.—The next annual meeting of this association will be held in Philadelphia, on the 8th of September next.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

JULY, 1857.

NO. 2.

ORIGINAL COMMUNICATIONS.

ART. I.—*Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity, AUSTIN FLINT, M. D., Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. IV. *Intercostal Neuralgia; Dorso-intercostal Neuralgia; Pleuralgia. An Address read at the semi-annual meeting of the Medical Society of Erie County, in Buffalo, June 9th, 1857.*

MR. PRESIDENT AND GENTLEMEN OF THE SOCIETY:

Permit me to thank you for the honor you have conferred upon me, in appointing me to address you on this occasion.

The subject which I have selected as an interesting matter of discussion, has already been amply treated of, by MM. Nicod, Bassereau, and Valleix, as well as by a few English and American physicians. I cannot offer you, therefore, anything novel; but will be able, perhaps, to bring before you more explicitly the important features of *Intercostal Neuralgia*.

The following remarks are based upon an analysis of the records of twenty cases of neuralgia, of which fourteen belonged to the disease under consideration, and upon the results of personal dissections of the intercostal nerves.

The conclusions are strikingly corroborative of the results of previous investigations. It was in 1818, that Nicod first gave a description of this disease, which has, within the past twenty years, been more fully treated of by MM. Bassereau and Valleix.

Intercostal neuralgia has been, and is still, to some extent, mistaken for *pleuradynia*; the distinctive signs of these two diseases have not always been recognized; in fact, *pleurodynia* has been the only term employed by many physicians to denote the various painful conditions of the parietes of the thorax, which could not be attributed to inflammation. Intercostal neuralgia has also been confounded with *spinal irritation* or *spinal tenderness*. It is our intention to point out the distinctive traits of intercostal neuralgia, and to show how it may be distinguished from pleurodynia or from spinal irritation so-called. These conclusions will be drawn from an analysis of cases recorded in the hospital-books of Prof. Flint, for the past year or more.*

(a.) *Causes.* The causes of intercostal neuralgia may be classified as the predisposing and the occasional or exciting.

Of the former or *predisposing*, all of the patients, fourteen in number, were *above the period of puberty*; and only three over thirty-five years of age.

The great number of male patients, thirteen, is due to the fact that these observations were confined to the male ward, with a single exception. The disease, however, is much more frequently met with amongst *females*, especially during the period of life in which menstruation occurs. The general condition of the patient, his *constitution*, in other words, will be found, *not enfeebled* usually, but good. The disease appears to exist more commonly in *persons actively engaged*, than in those pursuing sedentary occupations; seven of these patients were laboring men, and only one was not very actively engaged.

The *hygienic conditions* under which these patients were placed, (such as food, clothing, residence,) were *only fair*, not good.

The greater frequency of this disease during some *seasons of the year* than others, is striking; all but two of the cases occurred during the latter part of winter and the early part of spring. The changeable nature of this

* It should be remembered, that the number of cases of neuralgia recorded, does not furnish any evidence of the frequency of these diseases; for, as a general rule only the most striking cases were noted.

latitude, at these particular periods, is well known; probably, *atmospheric changes*, then, exert some influence as one of the predisposing causes of intercostal neuralgia.

The *left side* is more commonly affected than the right; and when the disease is manifested on both sides, the pain is more severe on the left; of these fourteen cases, the left side was affected in eight cases, and both sides in one case. The pain is not usually found to exist in every intercostal space, but is more frequently present, and to a greater degree, in the 5th, 6th, 7th, and 8th interspaces.

The exciting causes may be various; some times *long continued and active exertion* of either upper extremity may give rise to this disease, as occurred in one of these cases; a young man used for some weeks, his right arm almost exclusively in his business; the right side was attacked. A *blow on the chest* may likewise produce the disease; one of these patients received a blow from a fall on the affected side.

It appears sometimes during or immediately after *chronic cutaneous diseases*, particularly when the eruption is most copious on the chest or confined to that portion of the body; as, after or during herpes zoster or zona. Valleix has observed it frequently to accompany or follow *capillary bronchitis*.

The diseases, during or after the course of which intercostal neuralgia is most commonly met with, in this climate, are *pulmonary tuberculosis* and *periodical fever*; in two of these cases, it accompanied the former disease, and in six, it accompanied or followed the latter disease. Various forms of *neuralgia* may exist previously in other parts of the body, and often accompany or follow the disease; *gastralgia* is particularly cited by writers, as one of the most troublesome attendants of intercostal neuralgia. In the female case, there existed previously a notable cough, which resembled the "barking of a dog;" it was a hysterical cough.

In two of the cases, *colica pictonum* or *saturnina*, existed; the pain, in both these instances, was acute and lancinating, and persistent.

(b.) *Anatomy.* In order to comprehend fully the nature and importance of some of the signs of intercostal neuralgia, it is necessary to enter somewhat in detail, into the anatomical peculiarities of this portion of the nervous structure.

The intercostal nerves are *twelve* in number: they are essentially the *anterior divisions* of the *dorsal* nerves. Every spinal nerve springs from the spinal cord by two roots, which uniting in the intervertebral foramen, divide

into two portions; one of these being directed *backward*, supplies the skin and muscles adjacent to the spinous processes; and the other passes *forward*, and is distributed to the integuments and muscles of the lateral and anterior portions of the trunk; the latter divisions of the spinal nerves communicate freely with the sympathetic nerve. In the *dorsal* region, the *posterior* division of these nerves are much smaller than the anterior divisions; and they soon divide into branches supplying the muscles called *internal*, and those going to the integument called *external*; this separation takes place between the transverse processes of the vertebrae. On the other hand, the *anterior* divisions of the dorsal nerves, may be divided equally, into those which are confined to the thoracic parietes, and into those which are continued forward to the muscles and integument of the abdomen. The former, six in number, may be termed *upper intercostal* nerves; and the latter, six in number, *lower intercostal* nerves. They are called *intercostal*, on account of their relations with the ribs; they are distributed to the muscles and integument of the thorax and abdomen; they are composed of *motor* and *sensory* filaments; and they communicate with the ganglia of the sympathetic nerve, in the vertical line through the heads of the ribs. *The upper intercostal* nerves pass between the two layers of intercostal muscles, and about midway between the spinous processes of the vertebrae and edge of the sternum, give off their *first* branches which, from their position and from their distribution, are called *lateral cutaneous* branches; the main trunks of the nerves penetrating the internal intercostal muscles, continue forward, amid their fibres as far as the costal cartilages; here they are in contact with the pleura; near the margin of the sternum they pierce the *intercostal* and *pectoralis major* muscles; and instead of communicating with their fellows on the opposite side of the chest, run *backward* between the layers of superficial fascia covering the great pectoral muscle; and *terminate* by filaments to the integument, and by communicating branches with the lateral cutaneous branches just mentioned. These lateral cutaneous branches, after penetrating the external intercostal and the serratus magnus muscles, in that portion of the lateral surface which lies between the converging fibres of the latissimus dorsi and pectoralis major muscles, divide into two sets of branches, one passing *forward* and communicating, as stated, with the terminal filaments of the main trunks; the other passing *backward* in the layers of the superficial fascia investing the latissimus dorsi, and are distributed to that muscle and to the integument over the scapula.

The *lower* intercostal nerves, likewise six in number, pass through the intercostal spaces; the lowest of this set having no rib below it. From the

anterior terminations of the intercostal spaces, the nerves are continued forward, between the obliquus internus and transversalis muscles of the abdomen, to the outer edge of the sheath of the rectus abdominis; they perforate this sheath and are distributed in part to the rectus; and the *terminal filaments* penetrating again the sheath, near the median line of the body pass *backward* as cutaneous branches, in a similar manner to that of the terminal filaments of the upper intercostal nerves. The main trunks likewise give off *lateral cutaneous* branches about the middle of their course, which are divided and distributed in a manner similar to that of the lateral branches of the upper intercostal nerves.

In this anatomical description, there are several points having a bearing on the diagnostic signs of this form of neuralgia, which it is necessary to recollect. In the first place, there is *no difference* in the course or distribution of these nerves on either side to account for the *greater frequency* of the disease on the *left side* of the chest. Next, these nerves *do not form any communication* with their fellows of the opposite side of the thorax, so far as our dissections have informed us. Again, they *do not communicate freely with each other* on the same side; they *do not form any plexus* by the interlacement of their fibres; in this respect, differing remarkably from the other spinal nerves. Lastly, they *give off very few branches*, and these in a *particular locality*; these branches pass through muscles or their tendinous expansions, to the integument; the perforation in the tendinous structures being *invariably more or less quadrilateral*; and there are *three situations* at which, the *dorsal spinal nerves* penetrating muscular fibres, become *subcutaneous*, *one to the side of the spinous processes*, *one about midway from these processes to the sternum*, and *one close to the margin of the latter bone or to the median line of the body below the sternum*.

(c.) *Symptoms.* Intercostal neuralgia, it has been observed, may manifest itself during the course of diseases of the thoracic or abdominal viscera. But physical exploration of the chest would inform us of the nature and extent of a morbid condition of any of the thoracic viscera; and the signs presented in diseases of the abdominal viscera, could not usually fail to lead to a detection of the locality or character of the morbid state. Thus, intercostal neuralgia accompanies pulmonary tuberculosis and capillary bronchitis; and gastralgia has been found to be persistent, especially when intercostal neuralgia also exists. However, when this disease is uncomplicated, the symptoms presented are *remarkably characteristic*. The patient may be attacked suddenly with sharp and lancinating pain; but, more commonly, a

dull pain, intermittent or continuous, or merely a sense of uneasiness, not of actual pain, exists for a few days. The pain sooner or later *becomes acute*; it may be lancinating; and if so, the painful sensations are experienced in the course of the branches of the intercostal nerves. It may be intermittent, but generally is *continuous*; it was intermittent in three of these cases, and continuous in eleven. If the pain be intermittent, it does not usually disappear entirely; if so, it may be readily *elicited by pressure*; neither does the pain remain equally intense, if it be continuous; it may increase or diminish in intensity.

The most remarkable feature of this pain, is that it is usually *confined to particular points* on the thoracic or abdominal parietes; these may be *one, two or three in number*; generally, more than one painful point is present. If the pain be lancinating, it will shoot from these points along the course of the nerves. If pain is already manifested at these situations, or if it be intermittent, when *pressure* is made over these particular localities, the pain is very much *increased in intensity*, or is *suddenly elicited*. Where are these points situated?

The *first or vertebral point* is *slightly* to the outside of the spinous processes of the dorsal vertebræ and almost over the dorsal-intervertebral foramina, just opposite the divisions of the spinal nerves into their anterior and posterior branches.

The *second or lateral point* is *about midway* between the spinous processes and the margin of the sternum.

The *third or sternal or epigastric point* is—in the thorax—near to the edge of the sternum,—in the abdomen—just to the side of the median line.

The pain is *limited to these points*; it is *very circumscribed*; it extends over a surface which may be *covered by the ball of the thumb*, or about $\frac{1}{2}$ of an inch in diameter. If the pressure be continued, that is, not immediately removed, the pain very commonly disappears momentarily. That this pain is not produced by the efforts of pressure, that is, not due to the degree of pressure exerted, is shown by employing the same or a greater amount of pressure on the *unaffected side, without the manifestation of pain*, or discomfort even. Besides the pain being elicited or increased by pressure, *acts of coughing or forced inspirations*, or even *movements of the arms or trunk*, give rise to the pain or augment it.

(d.) *Frequency: Duration: and Termination.* Intercostal neuralgia is much more common than *sciatica*: of nineteen recorded cases of neuralgia,

only two were of sciatica, and fourteen of intercostal neuralgia. It is *much more frequently observed than pleurodynia*: during the same period that the fourteen cases of intercostal neuralgia occurred, *only a single case of pleurodynia* was noted; this was made one of the circumstances for investigation during the collection of these cases.

This disease is *apt to become chronic*, and to prove difficult of perfect relief. Six of these fourteen cases continued for some weeks before marked relief was obtained. As the attack may be sudden in a few cases, *so may its termination be*; this occurred in a single instance, one of the patients affected with pulmonary tuberculosis, died.

(c.) *Diagnosis.* After what has been remarked under the *anatomy and symptoms* of this disease, it will be comparatively easy to distinguish intercostal neuralgia from thoracic or abdominal disease, or from affections of the spinal cord or vertebrae themselves, or even from other forms of neuralgia. From other neuratic affections, it may be known by the characteristic features of the pain in intercostal neuralgia. These same characteristics would serve to assist in the diagnosis of caries of the vertebrae, or in irritation, inflammation, or softening of the medulla spinalis. And in abdominal disease, (as splenitis, gastritis, or peritonitis,) these signs would likewise aid us.

A careful examination of the chest, by the various methods of physical exploration, would almost always render the diagnosis of thoracic-visceral disease, certain. But, there are *two thoracic affections*, the distinctive signs of which—in reference to the disease under consideration—it would be well to mention more particularly. In connection with some cases of pulmonary tuberculosis, an inflammation of the pleura, circumscribed and with no effusion, occurs: it is called *dry pleuritis*; also, in the very earliest stages of *acute pleuritis*, before effusion has taken place; in either of these conditions the importance of an acquaintance with the characteristic pain of intercostal neuralgia, is apparent; besides the different nature of the pain, in these inflammatory diseases, there is more or less difficulty of respiration, and febrile movement, and there may be partially suppressed cough and friction-sounds. Moreover, the pain in inflammatory affections of the thoracic viscera, is supposed to be *increased by forced breathing* more than by the movements of the arms or trunk; whilst the reverse is generally the case in neuralgic disease.

For a rheumatic affection, however, intercostal neuralgia is most frequently mistaken; this is *pleurodynia* or rheumatism of the intercostal muscles. It is only of late years, that the distinction between these two diseases, has

been drawn, and now they may be easily and certainly distinguished from each other. Valleix says, "that when the pain may be attributed to muscular rheumatism, it is *more diffused, not circumscribed*. The pain on pressure, is generally *less acute*, and is *not confined to particular points* on the chest. In no case is there observed *pain seated in two points exclusively*, and these situated a greater or less distance from each other, as is the case in intercostal neuralgia. When the rheumatism is severe, the pain is *less intense on pressure*, than during movements of the body and during acts of coughing. As regards the lancinating pains, their distinctive characters are not well defined; and this explains how we may commit many errors, in neglecting to make a direct examination of the chest."

A tabular view of the distinctive signs of *intercostal neuralgia* and of *pleurodynia*, is here appended:

<i>Intercostal Neuralgia.</i>	<i>Diagnostic Signs of</i>	<i>Pleurodynia.</i>
1. Painful points generally <i>slightly diffused</i> or circumscribed.		1. Pain occupying a surface more extended, <i>not circumscribed</i> .
2. Painful points <i>separated</i> to a greater or less distance from each other.		2. Pain <i>not confined to points</i> more or less remote from each other.
3. Pain generally <i>more acute</i> on pressure.		3. Pain generally <i>less acute</i> on pressure.
4. Pain <i>less intense</i> on motion of the trunk or arms.		4. Pain <i>more intense</i> , sometimes insupportable on motion of the trunk or arms.

(f.) *Treatment.* The treatment may consist of external or of internal remedies. The *external* applications employed, have been *blisters* and *sinapisms*; in both the cases in which *blisters* were used, much relief was obtained, but the pain did not entirely disappear. The French writers place much reliance on small and often repeated vesications in the cure of this and other forms of neuralgia. *Sinapisms* were employed in six cases, with temporary benefit in each case, their effects are not permanent. The *internal* remedies consisted of *anodynes* and of *tonics*: the *extract of belladonna*, in doses of $\frac{1}{4}$ to $\frac{1}{2}$ of a grain, sometimes produce *much relief*; the *sulphate of morphia* was given in six cases and always with striking beneficial results. The quantity that may be given, under these circumstances, is very large: doses of a grain, repeated every two or three hours, were administered with-

out any unpleasant effects: the usual dose, however, did not exceed *half a grain*. The intensity of the pain is some measure of the amount required to produce relief.

The *tonics* employed in these fourteen cases of intercostal neuralgia, were the *sulphate of quinia* and the *citrate of iron and quinia*: the *former* employed in doses of five grains, three times daily, and continued for a week or more, *always gave relief*; and the pain disappeared and did not return: this occurred in *ten* of the cases under consideration.

ART. II.—*Discussion on the Diagnosis of Cancer in the French Academy of Medicine.* Translated by C. B. HUTCHINS, M. D., Buffalo, N. Y.

The following discussion in the Academy of Medicine of Paris, is translated from a work entitled "*Annuaire Des Sciences Médicales*," "*Par M. le Docteur Lorain*," published in Paris in 1856. It is a resumé of that discussion which took place in the Academy of Medicine, and which caused such an excitement in the medical world of Europe, in 1854 and 1855.

Since the questions examined in this discussion (viz, the utility of the microscope in diagnosis and the curability of cancer,) are of great interest, I have thought it worthy of translation for your Journal.

On the 26th of September, 1854, M. Jobert read a report of a case of cancer of the testicle, in a child at the breast, addressed to the Academy by M. Pamard, correspondent at Avignon. At the end of the report a discussion sprang up between MM. Robert and Velpeau, on the curability of cancer, and this question, at the request of M. Velpeau, was made the order of the day for the next sitting: such was the origin of the discussion upon cancer.

Sitting of October 3, 1854.

MM. Robert and Velpeau not taking the floor, M. Leblanc spoke on the question. He recognized several kinds of cancer: true cancer, epithelial cancer, melanotic cancer, etc. The first variety reappears very often after an operation: the epithelial less often, and the melanotic oftener than either of the others—even than the true cancer. The varieties of cancer are not always pure; the tissues of different kinds are often found in the same case:

then the disease is the more serious according as there is more of the true or melanic variety present. The observations of M. Leblanc extended to animals as well as to men.

M. Barth spoke in his turn and asked whether the microscope was useful in diagnosis, a question which he decides in the affirmative; but yet the microscope is not indispensable. The use of the microscope ought not to cause the neglect of anatomy, studied with the naked eye; the scalpel shows that the cancer type has a solid woof, a substance in which is infiltrated a special pulp. This pulp appears to M. Barth to have great importance: it seems to him easy to understand that the cancer cell is not found in all of the different stages of cancer.

As to the curability of cancer, M. Barth believes that cancer is rarely curable—more rarely than phthisis. The fear of the diathesis should not hinder a surgeon from removing a cancerous tumor. It is better to change the conditions in which a cure might follow than to preach incurability. Of these conditions a few are known. Cancer is the more grave when softened, ulcerated and the lymphatic ganglia engorged. There are more chances for cure if the cancer is solitary.

Sitting of October 10, 1854.

M. Robert brings to mind that this discussion arose from an opinion expressed by him, that the cure of cancer, especially of the encephaloid variety, is of rare occurrence. It appears that M. Velpeau is not of this opinion. M. Robert is astonished at the enormous proportions of cures announced by M. Velpeau, in his recent treatise on maladies of the breast. He brings to mind that M. Broca has given the result of nineteen tumours operated on by Blandin, and whose cancerous nature had been verified by a microscopic examination. None of these nineteen cases had been exempt from relapse in a space of time not going beyond two years. M. Lebert, in his treatise on cancerous diseases, says, that of thirty-four cases operated on, six died in the operation; twenty-one had a return of the disease in a lapse of time varying from three months to two years; and seven were lost sight of. Were those veritable cancers which M. Velpeau had cured so many times? Were there not in this number some benign tumors? M. Velpeau has not always known so well as now, how to distinguish tumors of the adenoid species. Besides, if one refers to the study of tumors in general, in different organs, frequent causes of error in diagnosis are found. The microscope has shown that independently of hypertrophic tumors, there are epithelial and fibro-

plastic tumors; and observation has shown that these last productions return much less frequently than cancer. It is necessary to put an end to the confusion which to-day reigns in the question of cancer.

M. Velpeau, in answering M. Robert, replies first to the argument which consists in throwing suspicion on the validity of his diagnosis. Mr. Robert is astonished at the number of cures I have given. I have less than any other the pretension to infallibility. But I can testify, without the fear of contradiction, that in a great number of cases the cancer presented itself with characters so distinct, so evident, that error was impossible, or if it happened, so rare as not to be worthy of mention. M. Lebert has never given a single denial to my diagnosis distinctly given in these evident cases.

M. Velpeau agrees that there are benign tumors which are so similar to those of a malignant character, that it is difficult to decide to which variety they belong.

It is on account of these difficulties of diagnosis that, wishing to call to his aid every means of reaching the truth, M. Velpeau had encouraged the labors of the microscopists, and he has now come to distinguish cancers from benign tumors, called hypertrophic, adenoid and fibrinous. After leaving out these tumors called cancerous, about one-fourth of those which had before been confounded together, M. Velpeau wished to establish classes among cancers, with regard to their tendency to return, and he had been able to distinguish cancers, which, removed by an operation, nearly always return: those which return often, those which return sometimes, and finally, those which return but rarely.

M. Velpeau recounted briefly the history of a lady on whom he operated in 1836, for an ulcerated encephaloid cancer of the breast, and who was entirely cured, and remained so until the present time. M. Velpeau cited two other analogous observations. To escape the reproach of incertitude in diagnosis, M. Velpeau says that since 1847 he has caused all the tumors which he has removed to be examined by the microscopists. As to the possibility of a return he thinks that sufficient time has elapsed since the operation, (seven or eight years) to put them beyond fear of the like.

M. Robert accuses M. Velpeau of confounding epithelial tumors with cancer. I regret, says M. Velpeau, that this question of epithelial and fibro-plastic tumors, obliges me to throw a stone into the camp of the microscopists. Among the heteromorphous (heterologous of Laennec) tumors, the microscopists place schirrhous and encephaloid, or to speak otherwise, what by everybody else is considered the genuine type of cancer; among the homœomorphous are found epithelial and fibro-plastic tumors; but in the

same class are placed, without offering any different microscopic character, warts, corns, venereal condylomae, etc., etc. Now I should like to know if in a clinic it will be possible to class these frightful ulcers, which destroy first the lips, then all the face, with warts and corns!

M. Velpeau recounted how M. Lebert had at first the illusion that the homœomorphic character excluded a reëpearance, or admitted it very rarely. But experience taught the contrary, and it was henceforth recognized by M. Lebert and his pupils, that not only epithelial tumors could reproduce themselves, but that they could attack the neighboring ganglion in the manner of veritable cancer. That is not all: a canceroid of the lips is removed and a little later the cancerous tissue develops itself, as was proved microscopically, in the superior maxillary, far from the original point of disease.

Moreover, these cancers kill as the other varieties. They may be called epithelial, if it is desirable, but they must still retain the name of cancer.

Let us pass now to tumors that the microscopists call fibro-plastic, and which constitute according to them, another class of homœomorphic tissues. M. Velpeau says that he has always been arrested by this denomination of homœomorphic tumor, given to an affection which increases and develops itself so as certainly to cause death, unless removed in time. The indurated base of a venereal chancre, and the kaloid, are composed of fibro-plastic tissue. But how can these lesions be compared with tumors so different, which spring up everywhere, acquire promptly enormous proportions, insinuate themselves into all of the tissues, and certainly result in death. The microscopists say that fibro-plastic tumors are homœomorphous and benign; and as proof they affirm, that once removed these tumors do not return. M. Velpeau demonstrated that this proposition was false, and in support of his opinion, he cited at length several remarkable facts, where fibro-plastic tumors which had been operated on, returned and infected the whole economy. According to M. Velpeau these fibro-plastic tumors reproduce themselves in the same manner as cancers. Moreover, where is the proof that the cancer cell, which they invoke can constitute an element distinguishing between two kinds of tumors. The microscopists themselves do not agree. The disciples of M. Lebert deny the cell: for them it is the nucleus which constitutes the distinguishing characteristic of cancer. I no more believe, says M. Velpeau, that the nucleus of to-day can be the essential characteristic of cancer, than I believed in the cell of yesterday. After having reported several observations where cancerous tumors were cured by an operation, and tumors, not cancerous (according to the microscopists) reëappeared and caused death, and where cancerous tumors followed a canceroid, M. Velpeau thus

defines his opinions: "Such, gentlemen, are the reasons which make me say that the microscope has not served to enlighten us in the diagnosis of tumors. There still remains an ignorance of cancerous tumors that the microscope has not enlightened. Then have I not a right to ask what has been the utility of the microscope in clinics? Of what use is it in view of the incertitude in which it leaves us? What reliance can be placed on it, if it reveals to us an element which is considered as characteristic of cancer, in tumors which are not cancerous; and if by the side of that it does not find this element in tumors, which from every other character are manifestly cancers?" M. Velpeau does not proscribe the microscope, he is only opposed to the infatuation of which this instrument is the object.

Sitting of October 17th, 1854.

M. Cloquet, after having complimented the experience and skill of the speakers who had preceded him, and declared himself a partisan of the opinions sustained by M. Velpeau, said that according to his views, all of the affections grouped under the name of cancer, do not have the same tendency to return. He cited a case of *Noli me tangere* cured by him with arsenical paste; he hesitates to believe that this *Noli me tangere* belongs to the class of cancers. True cancer constitutes a terrible family, each member of which distinguishes itself, by its greater or less aptitude to reproduction.

Several divisions can be established between the different members of this family, and these divisions rest at the same time on their anatomical character and upon their degree of malignity. M. Cloquet places in the first rank the melanic cancer, the incurability of which appears to him beyond question, since he has decided never to operate on another. After the melanic cancer in order of malignity, comes the encephaloid, then the schirrhous, cartilaginous, colloid, epithelial, and finally, the affection named fibroplastic, which must be ranked among cancers.

M. Cloquet insists on considerations of surgical order which ought to direct the practitioner; the position and development of the tumor, engorgement of the lymphatic ganglia. * * * The prognosis is often doubtful. There is no absolute certainty. * * * M. Cloquet reported several cases of cancerous tumors cured by an operation, contrary to all expectation. The question of the utility of the microscope was scarcely brought into question during the remarks of M. Cloquet, only that he thinks it cannot well be dispensed with in clinical examinations.

Sitting of October 24.

M. Robert, in replying principally to M. Velpeau, said that observations made twenty or thirty years since, were not entitled to the same consideration as those of later date, because diagnosis had been much improved in the last few years, a progress in which the microscope had its share. As to the cures obtained by M. Velpeau during the last few years, are they not too recent to affirm that a return of the disease will not take place; has not M. Velpeau himself, in his treatise on diseases of the breast, cited examples of return a long time after the operation?

M. Robert returns to the question of diagnosis: he does not believe in infallibility. There are difficult and doubtful cases in which M. Velpeau himself hesitates to decide absolutely: then the microscope is consulted and valuable information is obtained of the intimate nature of tumors. Such was the case in a female, operated on by M. Velpeau, for a benign tumor; but upon the possible return of which M. Velpeau would not commit himself. A microscopic examination of that tumor by MM. Robin and Verneuil, gave identical results, viz., absence of the cancerous element, the tumor being constituted especially of a hypertrophy of the secreting mammary cul-de-sacs, with atrophy of the secreting conductors.

I conclude from this, said M. Robert, that art is deficient; but I do not accuse the means which in this particular case, appears to me, to have surmounted obstacles that had arrested even M. Velpeau himself.

M. Robert complained that the discussion had been commenced without defining the subject of it: What is cancer? No one has defined that disease. The greatest disorder reigns in the nomenclature of solid tumors. * * * The persevering employment of our ordinary methods, and long continued labors consecrated to the study of tumors, have produced certain very useful documents; but at the same time very insignificant results. It is to them that we owe that sad richness of empty words and comparisons, often very coarse, which to-day encumber pathology. What do all these words teach you? colloid cancer, tuberos, woody, napiform, chondroid, pustulous, encephaloid, schirrhous, lardaceous, medullary fungous, hematodes? * * * * Chancrous, eating, perforating ulcer, noli me tangere, etc.? What signification is there for you in the hardness or softness, or even the famous creak of the scalpel so peremptory in the past?

As to the cancer juice, as to the pulp, this sign is wanting sometimes, and is found when there is no cancer.

The microscope proposes for cancer a clear and precise definition. There is but one cancer, and that is the one which contains the cancerous element.

There are other morbid tissues which may be confounded with cancer, and which, sometimes, may cause death. These tissues result from an exaggerated production of one or several elementary substances, which normally enter into the constitution of our bodies. Finally, aided by the microscope, anatomists had better studied the intimate nature of tumors, and having learned their development and growth at the bedside, they have been able to discover differences between them and have proposed a revision of that part of nosology.

M. Robert does not hesitate to accept the definition of the microscopists with regard to the specificness of the cancer cell or germ, and he demands why M. Velpeau refuses to accept this definition. The development of cancer is also peculiar; its tendency to relapse also very marked; cachexy is frequently the result.

With regard to fibro-plastic tumors, M. Robert thinks that they should not be classed among benign tumors; but he denies that they should be confounded with cancer; their progress is slow, they rarely return, and even a cure may be effected after several relapses.

Coming to epithelial tumors, M. Robert says, that the comparison made by M. Velpeau between these tumors and corns and warts, is more specious than true. In effect if the element is the same, the structure is altogether different. The return of cancroïd tumors is more rare than cancer; the infiltration of the neighboring ganglia is also very infrequent.

To resume: the microscope has been more useful in surgical diagnosis than M. Velpeau is willing to concede; and since the microscope has revealed to us the intimate structure of tumors by glandular hypertrophy, the diagnosis of these tumors, their progress and evolution, have been better studied: having been applied for only a few years to pathological anatomy, the microscope has already produced happy results. The young school, as M. Velpeau calls it, is then on the right track. It is necessary, then, for it to persevere, and resolutely go ahead, every day will have its progress.

During the same sitting, M. Barth presented a pathological specimen (cancer of the testicle,) and asked if the results given by the microscope and clinical experience, coincided; he pointed to the dangers which would result from an exclusive tendency to pay attention only to certain microscopic elements, to determine morbid productions.

M. Velpeau presented, also, several tumors whose character could be easily

determined by the naked eye: according to his judgment, one was schirrhous, the other also cancer; there was no doubt with regard to them.

M. Gerdy protested against the expression of certitude employed by M. Velpeau; such certainty as M. Velpeau believes in cannot here be admitted.

Sitting of October 31st, 1854.

M. Malgaigne proposes to examine, at this sitting, three distinct questions:

What is the utility of the microscope in science?

What is the utility of the microscope in practice?

What is the degree of curability of cancer?

M. Malgaigne first examines the state of science before the application of the microscope to the study of tumors. Three schools have brought forth their doctrines since the commencement of this century. The first can be represented by Scarpa and Boyer; the second, by Bayle and Laennec; the third, or English school, by A. Cooper and Abernethy. Boyer guiding himself alone by the anatomical character of tumors, distinguished only the hard schirrhous, which return but rarely; from the soft schirrhous, which nearly always return. Scarpa was no more advanced. Bayle and Laennec admired the encephaloid, the schirrhous, the colloid and the melanotic. Abernethy and A. Cooper delighted, the first in benign sarcoma, which comprehended adipose sarcoma, cystic sarcoma, etc., and malignant sarcoma, divided into tuberculous, schirrhous, medullary, etc.; and the last in benign tumors, which he called adipous, scrofulous and irritable, and malignant tumors divided into schirrhous, soft cancer, and fungoid cancer.

In 1844, M. Cruveilhier excited a discussion in the Academy, upon cancer, which he said should not be confounded with certain fibrous tumors of a benign nature. This distinction was not then admitted without objection. M. Velpeau was the first who had called to his aid the microscope, and he would never repent it; to the microscope belongs the honor of having entirely changed the face of science.

M. Malgaigne denies the proposition of Bichat, when two diseases differ in their symptoms, their march and their termination, they differ, also, in their location and the lesions which accompany them, and reciprocally when the anatomical lesions are different, when the structure of two pathological products is not the same, the functional disorder, their evolution constitute, also, affections of a distinct nature. This law is false. It has led M. Lebert to affirm that fibro-plastic and canceroid tumors acted in a very different

manner from cancer. Experience showed him that he was wrong. M. Lebert, said M. Malgaigne, would have been perfectly right had he confined himself to anatomical distinctions and classifications. But as soon as M. Lebert left the anatomical to enter upon the practical, he run against impossibilities, and clinical facts immediately ruined his doctrines. With regard to benign tumors the microscope has not given us much light. Passing to the question of the curability of cancer, M. Malgaigne says that if he believes the cure of cancer very rare, he does not absolutely deny it.

During the same sitting, M. Larrey spoke in favor of the microscope. We cannot give a better idea of the sense of his remarks, conceived in a spirit of conciliation and liberality extremely laudable, than in transcribing a few of the last sentences: Gentlemen, I will say that the Academy is not yet in a condition to decide for or against the application of the microscope in the diagnosis and prognosis of tumors. I would wish, for my part, and I submit this proposition to the judgment of the Academy, I would wish that the cause of the microscopists was defended by them, or one of them, in behalf of his fellows, so that his arguments printed in our bulletins at the end of this discussion, would show to the public the community of our efforts to throw light upon this dark question of cancer, and leave us a hope, and not an illusion of its curability.

In the same Sitting, Nov. 7th,

M. Velpeau again took the floor. He commenced by calling to mind the two propositions which he sustained at the commencement of this discussion: first, the possibility to sometimes cure cancer by an operation; and in the second place, to diagnose cancer without the application of the microscope. In 1854, here in this Academy, he had been the first to speak of the cancer cell. "Be persuaded," said M. Velpeau, "that it has not entered into my mind to despise and condemn any means of investigation. I accept all, and make use of every method, and when they tell me something which does not accord with what I have seen, I make a note of it; but when what they announce is contrary to what experience has taught me, I reject it, at the same time of course permitting others to accept if they choose."

M. Velpeau does not admit that there is a cell characteristic of cancer, and there are microscopists who think as he does: MM. Mandl, Virchow, Bennett and Paget. * * * Epithelial cancer has no cells. * * * Laying argument aside, M. Velpeau invokes the results of his long practice. Since 1824 he has not ceased to make investigations on this question of can-

cer. * * * M. Velpeau has seen the cell in many cases, but there are cases where it is wanting, and it has not been found in many cases which for him and other surgeons were manifestly cancers. After such results he could not believe in the specificness of the cell. Besides the microscope has found the cell in tumors, which were certainly not cancers. M. Velpeau cited, among other examples of cancer without the cell, the case of a poor woman operated on by him a year ago, who is now dying, suffocated by a cuirasse of tumors which have sprung up, covering the whole chest. There the microscope did not find the cell and had given a favorable prognosis.

M. Velpeau mentioned the case of a man who had been operated on for a cancrroid of the nose; it returned, and death followed. But the microscopic examination, before the operation, did not discover the cell; afterward the cell was found in great abundance. A woman presented herself with a tumor of the left breast—M. Velpeau operated—the tumor contained no cells; but the disease returned, not only in the left, but in the right breast also, and the autopsy showed similar tumors in the lungs; but these tumors examined by the same microscopists, were declared to contain the cancer cell in great numbers. For M. Velpeau, the two diseases coming so close together are one and the same lesion. As for a transformation the microscopists were the first to reject it. Until something more is gained, M. Velpeau maintains that there are cancers without the cell, and benign tumors which contain it. The microscopists demand what is a malignant tumor, and they wish that we should define cancer. There are many things that we know better than we can define; but for the want of a better definition, I would be perfectly content with one like this: a tumor, a plaque, a fungosity, having the character when once established, to increase, to invade and cause to disappear the neighboring tissues: in one word, to invade the organism until death ensues. M. Velpeau calls malignant tumors, those which when once established in the organism, develop themselves and destroy the neighboring parts until they entirely disappear, or cause the death of the individual. There is no other tumor but cancer, which acts in this manner, and this term (malignant) serves to distinguish cancer from all other lesions.

M. Velpeau then showed that epithelial tumors reproduced themselves in the same manner as cancers; as to the frequency of their return, if it is less, this is not sufficient to strike out these tumors from the class of cancers.

Fibro-plastic tumors, no more than the preceding, are exempt from relapse, and they reappear sometimes far from the point from which they had been removed. (M. Velpeau cited several facts in support of this opinion.)

After having given the case of a lady operated on by him for an enormous ulcerated cancerous tumor, which did not return, M. Velpeau came to the question of the curability of cancer. * * *

* * * "When I have given an affirmative diagnosis," said he, "I can guarantee its validity. Besides, the nature of these tumors cannot be learned (microscopically) until after the death of the patient, or after their removal; but in practice a *post-mortem* diagnosis is of no utility, and a diagnosis after an operation is of no use to guide the conduct of the surgeon." * * *

M. Velpeau produced statistics from which it appeared that the microscope had not disputed his diagnosis. Of 120 tumors for this year alone, he had found 28 adenoid, others hypertrophies. * * * M. Velpeau complains that the microscopists do not always agree upon the nature of tumors, and when some do not find the cell, others will discover it. * *

The facts upon which M. Velpeau sustains himself in affirming the curability of cancer, are numerous, and a few go back fifteen and twenty years without a return of the disease. There are cancers which, assuming a special form, are worse than others, and renew themselves with almost absolute certainty. For kinds so malignant and whose return is almost the infallible law, M. Velpeau does not operate, because the operation never cures; but it is by no means the same in all cancers.

M. Velpeau believes that cancer is a disease primitively local, the cancerous diathesis and infection coming on later.

M. Velpeau terminates in requesting physicians not to repudiate the examination of the patients for the examination of the tumors.

Sitting of Nov. 21st,

M. Amussat pronounced a discourse, the conclusion of which we transcribe:

1st. To avoid believing that cancer is an incurable affection, for that unhappy idea tends to diminish the zeal of our observers and surgeons who labor to push forward the progress of science; I believe to the contrary, that it is necessary to stimulate and encourage them by every possible means, and I have indicated those which appear to me the most proper to attain that end.

2d. In the present condition of science and practice, as soon as a patient is attacked with a cancerous affection, it is necessary, after having carefully examined him, to seek from him with discretion, but at the same time with persistency, all information with regard to the diseases which have been

most frequent in his family; and if in this examination any hereditary taint should be manifest, it is necessary to act immediately with all the most efficacious means at our disposal.

3d. As soon as an operation is decided upon, whether by the bistoury or with caustica, it is necessary to go beyond, rather than stop this side of our aim, that is to say, to entirely destroy the cancer, and not to stop until the healthy parts are reached. Very often timidity in operations has been the only cause of relapse.

4th. When it is thought preferable to employ caustica, the most powerful should be used; avoid caustica which act slowly and superficially. I am not in favor of the red-hot iron, which is so frightful, and, in certain cases, dangerous.

5th. It is necessary to assure yourself, by a minute examination many times repeated after the apparent cure, that there is no trace of the cancerous affection left.

6th. Finally, until the true nature of cancer is understood, we should advise after operation, depuration, or a seton, and proper hygiene.

M. Cloquet, after having sought to distinguish tumors after certain characters, such as their being hereditary, liable to relapse, and incurable by aid of nature alone, said that the microscopists were only a continuation of the anatomical school. Lately, said he, they have applied the microscope in pathological anatomy; it is a step forward in the same direction, but there is nothing there, upon which to found a school or a new doctrine.

M. Cloquet thinks that there are cancers with cancer cells, so called; cancers with epithelial cells; and cancers with fibro-plastic cells.

M. Cloquet recognizes that there are differences in the march of cancer, and that these differences accord with the distinctions established by the microscope. He believes in the curability of cancer. * * * He terminates in begging the anatomists, the clinicians, and microscopists, to unite their efforts to a common end.

M. Delafond, after having established that cancerous diseases are very frequent among herbivorous and carnivorous animals, discussed the question of the cancer cell. For him the cancer cell is not a specific element; it is similar in every character to all other cells making up the organization. This cell is regular and round at its birth; it becomes deformed when compressed; it is sometimes penetrated by pigmentary matter, * * * by fat molecules. After explaining at length the formation of vegetable existence, M. Delafond showed, by plates, the cell presiding at the birth of tissues; he thinks the method of sustaining vegetables is the same as that presiding in

the sustenance of healthy animal organism. The cell is everywhere the same. What causes the nature of tissues to vary, is the different materials with which it (the cell) fills itself. * * * The cancer cell takes its growth in the midst of a liquid, which is the proper element of cancer. * * * Once formed this cell will assume different forms, adapting itself to the conditions in which it finds itself. If compressed by a fibrous tissue very resistant, they unravel themselves to form veritable fibrilles, exactly as this takes place in normal tissues. * * * M. Delafond, in support of his assertions, produced numerous plates where the different forms of the cell were visible.

He concludes that with regard to microscopic anatomy, there is no difference between encephaloid cancer the best characterized, and fibro-plastic tissue.

Sitting of Nov. 28th.

M. Delafond again took the floor, and brought new arguments to the support of the doctrine that he had advanced at the last sitting. He thus resumed his observations: "There exists, in animals as well as in vegetables, a cell which is active in the development of both; there exists besides the normal cell, another cell which may be called a pathological cell, of which the cancer cell is only a modification; this cell may exist not only in cancer, but in the fibro-plastic tissue in animals; this cell offers but little difference, whether it be examined in schirrhous, encephaloid, or fibro-plastic tissues, with regard to its form, structure, or dimensions, or the modifications impressed upon it by any of the common reactivities. I say, then, that in practice, the microscopic proof of the cancer cell is not sufficient to affirm whether the tumor be cancer or not; but that in diagnosis, the cell is a character which never should be neglected, because in most true cancers it is found, and its presence adds one more presumption to those which have existed from a clinical and anatomical examination of the tumor." * * *

Sitting of Dec. 5th.

M. Bouillaud took the floor in favor of the anatomical school. His remarks are difficult to analyze; to substitute the dryness of analysis for elegance and brilliancy, destroys the charm. The speaker raised his views to a grand elevation, and his style was upon a level with the subject that he treated. Placing himself on general pathology, M. Bouillaud lent the support of his talents and warm convictions, to the law of Bichat, attacked by M. Malgaigne.

What is true and incontestible in the law of Bichat, said M. Bouillaud, is, that it is in perfect accord with what we observe every day, in those diseases that I call common, which in truth are almost the exclusive object of our observations and practice; I say, gentlemen, that this law is true in all cases; I say that every day the phenomena observed on our patients, reveal to us the condition of their organs; I say that anatomical lesions make known to us the functional disorders which they had produced; and I do not know, in truth who would contest it; for if that were not so, there could be no more instruction, there would be nothing more to do but to close the schools.

Justifying the anatomical school from the reproaches heaped upon it, M. Bouillaud affirmed that no one had ever said that the anatomical lesions would give the key to all of the problems of pathology. Passing in review the men who had been the founders of the Paris school, M. Bouillaud cited Morgagni, Haller, Corvisart, Pind, Bichat, Laennec, Broussais. A pure organic school never existed. This anatomical school which has been alluded to, does not exist; the school of Paris is organico-vitalist.

The anatomical diagnosis is useful for its precision; but it is not complete until a physiological diagnosis is joined to it.

Coming to the question of cancer, M. Bouillaud says that if the cell is so specific as the microscopists assert, it must be recognized that it is of immense value in the diagnosis of cancerous diseases. * * *

M. Bouillaud reproaches M. Velpeau with having been the decided adversary of the microscopists, no matter what he says to the contrary; and M. Delafond with having obscured the question by developing his ideas on the proteic cell.

With regard to the curability of cancer, M. Bouillaud will not deny its possibility, but makes a distinction between local cancer and the cancerous diathesis. * * *

M. Bouillaud demands, in conclusion, that a committee be appointed by the Academy to examine, in company with the microscopists, certain tumors selected for the purpose.

Sitting of January 2d.

M. Robert replied principally to the arguments of M. Delafond; to the designs produced by that speaker to prove the unity of the cell, and brought forward other designs representing very different forms of cancer; also the fibro-plastic and epithelial elements. * * *

M. Delafond again defended his doctrine of unity of the cell * * *

sustaining himself by respectable authorities, such as Purkinje, Turpin, Valentin, Schluttz, Wagner, Bischoff, Martin, Barry, Vogel, Müller, Henle, etc., he proved that this doctrine was far from being abandoned. The speaker cited in favor of his opinion, passages borrowed from the writings of several modern authors, Vogel, Virchow, Bennett, * * * and concluded that M. Robert had yet shown nothing to the assembly proving any difference between normal cells and cancer cells. M. Delafond entered into practical details with regard to the size of the germs and the cells in animals and in man. * * * He terminated by conclusions, the last of which is a perfect resumé of his opinions:

“ These facts show that the blastema, the morbid principle of cancer, resides in an amorphous principle, unseizable by our present means of investigation, and independent of these fibro-plastic and epithelial cells, and of the cell improperly called cancerous.”

Sitting of January 9.

M. Leblanc replied to M. Delafond, and spoke principally upon points interesting to the veterinary surgeon, viz., the relative frequency of cancer in herbivorous and carnivorous animals. * * *

Sitting of January 16.

M. Velpeau insists upon the point that tumors may not present the same composition at every period of their development, that is to say, at the commencement they may not contain the cell—but later it may be found. On the other hand, a tumor may return and the cell may not be found, when it was found previous to the operation. M. Velpeau brings up the case of a woman, who had on the left side of the chest a tumor of doubtful character, and who afterward presented a tumor of the other side of the chest, whose character was evident; in the doubtful tumor the microscope discovered the cell, while in that one which was unquestionably cancer no cell was found. * * M. Velpeau proves by facts that epithelial and fibro-plastic tumors, return like cancer, and are capable of multiplying themselves and appearing in different parts of the body. With regard to the term malignant, M. Velpeau cannot explain why some persons feign to be unable to comprehend this word. * * * It is the essence of the tumor which constitutes its malignity; a cancer is malignant, whatever be its size, age, or position, * * but there are degrees of malignity among cancers. There is but the

cancer (whether it has the epithelial or fibro-plastic cell) which presents constantly this character of malignity, whose inevitable consequence is death.

M. Velpeau wishing to show how much confusion microscopy has introduced in the nomenclature of tumors, thus expresses himself:

"I remove in the same week a keloide, a hard, horny, indolent tumor, which never ulcerates and has never caused death. What is this? It is fibro-plastic, replies the microscope. I then remove an engorged lymphatic ganglion, a tumor essentially benign, without doubt. What is this? Fibro-plastic. I removed next a soft tumor of gummy consistence, from the calf of the leg; it was a mass resembling one of those fibrinous concretions found in the heart of some individuals after death. What is this? Fibro-plastic. I remove some of those fungosities found around articulations. Still fibro-plastic. Finally, I ask of them what that hard, woody substance is forming the base of a venereal chancre? Still fibro-plastic. But see, gentlemen, how all of these resemble one another: among these tumors are hard and soft; some transient and some persistent; there are some which never reproduce themselves and some which return with the greatest obstinacy. But it is the microscope that has said it; all these form a group excessively natural. Before we were in a chaos of confusion: see how we can profit from this new light."!!

"Let us continue: here upon the lip is a little tumor which has just commenced to grow; nevertheless that little tumor will inevitably produce death. What is it? It is epithelial. Here is a corn on the toe; what is it? Epithelial. And this fungosity on the mucous membrane of the anus; what is it? Still epithelial. And this little concretion raising the conjunctiva? Epithelial. And upon this tongue here is a tumor which goes on increasing until death ensues, if it is not removed in time, and even then will almost certainly return and cause death; this is still an epithelial tumor. And in this uterus there is a tumor soft as cheese, and in other organs tumors hard or horny. What is all this? Epithelium, always epithelium. There is light."!! * * *

M. Velpeau is, and has always been, an anatomist, but he takes the clinic as a point of departure, and seeks to diagnose disease during life.

* * * After having reproduced the arguments which had already been exposed in the course of the discussion, M. Velpeau terminates with kind words for the microscopists, to whom, however, he makes no concessions.

After stating where these discussions are published in full, the writer thus resumes:

And now can any one state the opinion of the Academy with regard to cancer and the microscope? Does the Academy believe that cancer is curable? Does it believe the microscope useful in the progress of pathological anatomy, and aids in the diagnosis of tumors? We will not attempt to be the interpreter of the opinion of the Academy.

It is incontestible that no question has so excited the medical public, that never had so much talent and feeling been expended in a scientific discussion. Here are the results of all these efforts and this passionate strife:

Matters remain as before the discussion; but the question has been laid down, science arrested at a given moment, and it has been possible to verify the state of our knowledge on this subject in the year 1855. It is now impossible to go back; it is necessary to choose between the clinic alone and the clinic aided by anatomy.

For us, who believe in the progress of anatomy in general, both normal and pathological, and who do not believe that the clinicians can dispense with the anatomists, we will continue to have faith in the future of the microscope applied to medicine, and we will not accept the anathema with which this precious means of knowledge has been struck.

All the reproaches addressed to the anatomists, only signify one thing: that they do not know anatomy well enough. They will study it better, and the clinicians will be benefitted in spite of themselves, from the labors of the anatomists. But is it not permitted to think, that the differences at present manifest between the members of the medical family, who should agree, will disappear when it will be proved that there are anatomical facts, and clinical facts, and that anatomy cannot bend itself to the exigencies of medical theories.

Perhaps this misunderstanding would have been avoided if the base on which the discussion should rest, had been established before commencing it. Before agitating the question of the curability of cancer, it would have been better to define cancer; but if it is defined clinically, the discussion would be between the clinicians: and if anatomically, between the anatomists. Unhappily confusion reigned during the whole course of the discussion.

The modern microscopists acquired their education at the schools of clinicians, and conducted by the hand, they have followed the wanderings of their teachers; they have studied with preconceived notions; they learned the word cancer and have sought for cancer. * * * They have had the hope or illusion of finding this ideal type; they took their cue in consequence and promised what was demanded of them. Now they are set free from the tutelage which guided their first steps; they exist of themselves; they

have opinions of their own, which by some are repudiated. Why then call on them for aid? They can only tell what they see; anatomical facts are imposing; they cannot be made use of, but they cannot be denied. If microscopic anatomy is an evil it is an evil with which it is necessary to accustom ourselves to live henceforth. Young men who are not responsible for the past, will devote themselves to microscopic anatomy, and by this means will learn things which it was not given to their ancestors to understand.

ART. III.—*Indigenous Races of the Earth; or, New Chapters of Ethnological Inquiry*; including Monographs on Special Departments of Philology, Iconography, Cranioscopy, Palæontology, Pathology, Archæology, Comparative Geography, and Natural History: contributed by ALFRED MAURY, Bibliothécaire de L'Institut de France; Secrétaire Général de la Société de Géographie de Paris; etc. etc. FRANCIS PULSZY, of Lubocz and Cséfalva, Fellow of the Hungarian Academy; Correspondent of the Instituto di Corrispondenza Archeologica di Roma; Late Under Secretary of State in Hungary, etc., etc., etc., and J. AITKEN MEIGS, M. D., Professor of the Institutes of Medicine in the Philadelphia College of Medicine; Librarian of the Academy of Natural Sciences of Philadelphia; Recording Secretary of the Philadelphia County Medical Society; Fellow of the College of Physicians, etc. (With Communications from Prof. Jos. Leidy, M. D., and Prof. L. Agassiz, LL. D.) Presenting fresh Investigations, Documents, and Materials; by J. C. NOTT, M. D., Mobile, Alabama, and GEO. R. GLIDDON, Formerly U. S. Consul at Cairo, Authors of "Types of Mankind." Philadelphia: J. B. LIPPINCOTT & Co. London: TRUBNER & Co.

We have before us an advance copy of a book destined to make some stir in the scientific world, entitled, "Indigenous Races of the Earth." The authorship of this work is due to several hands. Dr. J. C. Nott, of Mobile, a distinguished ethnologist, contributes much of the argument derived from external forms; Geo. R. Gliddon, formerly U. S. Consul at Cairo, adds some interesting chapters derived from the philology of nations; while Prof. Maury, the distinguished Hungarian philosopher Pulszky, J. Aitken Meigs, a professor in the Philadelphia College of Medicine, and Prof. Agassiz, also aid by the contribution of chapters of special subjects.

Several of these writers were engaged three years since in the production of that startling ethnological work, "Types of Mankind," and the present volume is intended to offer more comprehensive evidence of the doctrines then enunciated. The central idea of both volumes is, therefore, the same; and may be expressed in the proposition that the human race is not des-

cended from a single pair, but that it, as well as all species of animal life, is the result of a series of creations, in nations or families, at different epochs. Thus the white races were created for the occupancy of the temperate zone, and associated with them were various families of animals, designed, also, with a view to their adaptation to special localities. So, too, the Negro, considered as the lowest form of humanity, is still specially adapted and created for the region in which we find him a native, and with him we find associated those higher forms of animal life, which most nearly resemble man. It is a remarkable fact in the distribution of animals, that the highest orders of monkeys are found inhabiting the same locality as the lower orders of Negroes.

The scope of this doctrine is evident. It brings the chronology of man in unison with that of the earth's surface, and assigns a period of 20,000 years before Christ as the shortest residence of the human race upon the globe. It recognizes a diverse origin for the different races of both man and animals; and this is not confined to the five great families, but is extended to many of their subdivisions which are supposed to have been created at different times: not in single pairs, but in nations.

If we accept this doctrine as scientific truth, many other contingent doctrines necessarily follow. We must believe that Adam was not our common progenitor; that, therefore, accepting the Mosaic account of his fall, his sin could not have involved those races not lineally descended from him. Reaching further down the stream of time it lays a ruthless hand on other ideas dear to our sentiments, if not entirely consonant with our reason. The redemption through Christ, was devised to free mankind from the curse of Adam's fall, but if only a limited family of the human race were included in that curse, then the atonement fell short of the broad scope hitherto assigned it, and Christ died not for all, but for a small branch of the human family.

It is evident that a scientific theory like this, which reaches beyond and above the ordinary considerations of scientific truth, should not be accepted without close examination. Doubtless, all will be reconciled at last; the great fundamental truths on which not only our religion, but our civil and moral government are based, will stand immutable; but it were well to avoid the period of heresy and unbelief, of running after strange doctrines based on a half appreciation of the truth, which must intervene before the final agreement of intelligent opinion.

To this end it is necessary that all present discussion should be confined to the purely scientific question: Have the races of men and animals now resident on the earth a common origin at a certain point in Asia, from whence

they were distributed throughout the world, or have they been created in their present form in the regions they now inhabit, and for which they are especially adapted?

The body of facts to which we must resort to solve this question, are to be found in what is at present known of the distribution of races and the effects of climate upon them. If we find that types of race are permanent, and that climatic changes do not effect any sensible or lasting change upon them, the position of Agassiz and his coadjutors will be sustained.

One great argument is to be derived from permanence of type. If we find that crossings and intermixtures of races, taken in connection with climatic influences, blot out the original type and substitute another for it, differing in essential particulars, then we may account for all the differences of race without supposing special origin for them. Opportunities for studying this are nowhere more abundant than in America, where we have a great variety of half-breeds.

Take, first, the most widely separated races—the white and the negro. Connections between them are prolific, but the offspring is in some sense a hybrid. The mulatto is a feeble existence, not fitted for any wide range of labor, or capable of much endurance. He is found when left to himself, not in the field, the workshop, or engaged in the inventive arts. He is employed in such duties as his physical nature permits, the menial duties of the household, and similar avocations. He is short-lived, presents a marked tendency to scrofulous and tuberculous disease, and the few children begotten by him develop still further this tendency. Few mulattoes reach anything like old age, and their families soon perish from the destructive elements generated by an improper cross. These peculiarities of the mulatto are not attributable to either origin, the white or the black, but simply to the fact that the races are physically so widely separated that an intermixture results in hybridity, as in the case of the horse and the donkey; and the deduction is, that whatever the original source, Adamic or diverse, the difference is now so wide as not to be overcome by amalgamation.

Taking now the white and American Indian races—more nearly allied than the white and negro—we find to a limited extent the same result. The Indian half-breeds are few in number, and do not perpetuate themselves to that full extent to be expected from the blending of two strong races. Indeed, so strong is that instinct of the white nature which regards these broad crosses of race as sinful, that amalgamation has never taken place to any great extent, except when the Indian has come in contact with the swarthy whites, the Gallic or Iberian Celt, in Central America, and the

result of this union has been the production of a miserable and worthless race, incompetent to self-government, and with difficulty held above the level of savage life by the old Castilian element which still maintains its purity in those regions.

As we come to races nearly approximating each other, as the amalgamation of the Teutonic and Norman with the Celtic and Saxon elements, we have none of these evidences of hybridity. Prolificacy is not impaired, and the resulting offspring is hardy. Another wide difference is in the permanence of type. In unions of the white with the negro or Indian, we have a blending of the two without any tendency to revert to either of the original types; while in a mixture of the Saxon and Norman, for instance, we have a constant tendency to reproduce one or the other race. Of two children of such a union, the cross may be perceptible in neither, one child will be pure Norman, the other pure Saxon; and each will present, not only the physical, but the mental characteristics of its race. Where a mixture does take place in the first generation, and a blending of types results, it is only temporary; and in the second or third generation we shall see offspring presenting either the Norman or Saxon features in their purity.

The bearing of these facts, and others like them, is in favor of the new theory. Where the difference between races is wide, we have a hybrid offspring, the resulting cross is only temporary, and soon perishes from the elements of disease inseparable from it. Where the difference is narrow, and no hybridity follows, we have a constant reproduction of the type, a reversion to the original pattern. This is peculiarly marked in the Jewish race, which through all vicissitudes of climate and of government, and to some extent of amalgamation, still preserves the characteristic features which it had ages ago. The Grecian model of 3000 years ago, is still found unchanged in the Pelasgic nations, and though their daughters have for centuries filled the harems of the Turk and Arab, the latter are Turks and Arabs still.

In view of the short period assigned for the residence of man upon the earth, and of the fact that during three or four of the six thousand years no known changes of race have resulted from amalgamation, it is extremely difficult to assign the production of any new race to the blending of two pre-existing types. Indeed, could we do so, it would hardly help the argument; for we have then to account for the presence of two diverse races arising from the common Adamic stock. And again, if we are able to accomplish this, and account for the existence of the white and the black from climatic causes operating on the original Adamic stock, all that we have said heretofore, goes for nothing, and the Mosaic theory is maintained.

The question now comes up: What effect may climatic causes produce in modifying the complexion or features of a race?

The most obvious argument adduced is that the effect of a tropical sun is to darken the skin, and that it is possible that the perpetuation of this effect for ages might produce the blackness of the negro, while the gradual deterioration in mental capacity and physical conformation, consequent upon great heat, might also account for the thick lips, the curly wool, and the other peculiarities of the race.

Such a cause of diversity, to be truthful, should be constant. In the hot regions of Central Africa we find the negro, but we also find him in the temperate climate of the Cape of Good Hope; and again in the same latitudes of Asia we find a brown race, claiming great antiquity. On the continent of America we have one single race overspreading both temperate and tropical regions. The Esquimaux of the Polar regions is an exception, but he, too, is swarthy; and in the wilds of Canada we find the same complexion, straight hair, and other national characteristics, as on the line of the Equator.

Another argument brought by the advocates of the new theory is found in the distribution of animals. We have no space to go into an examination of the scheme of Agassiz, but it is evident that some startling facts are adduced. The anthropoid monkeys are found in some fifty varieties, differing very much in shape and intelligence. It is found that the same regions contain the highest forms of monkeys and the lowest forms of negroes, and that a gradual improvement is found in the human animal as we pass to lands where the monkeys deteriorate—that is differ more widely from the type of humanity.

Such are the arguments of this work on Indigenous Races. That they have force enough in themselves, and weight enough in the character of their advocates, to give them importance, cannot be denied. The present volume is an additamentum to "Types of Mankind," and consists of a vast medley of facts thrown together in the most admired confusion. The authorship is hydra-headed and argus-eyed, and each branch of the subject is a polyhedron. The result is that each eye of each head examines each side of the polyhedron, and a more inextricable tangle of logic and fact was never woven than this book presents. Aside from its real scientific merit, and the excellence of its typography, it is, in all its arrangements, the most villainous specimen of book-making on record.

For sale by PHINNEY & Co.

ART. IV.—*Clinical Reports of Diseases, Injuries, Surgical Operations, &c., &c., in the Male and Female General Surgical and Private Wards of the Buffalo Hospital of the Sisters of Charity.* Care of Prof. HAMILTON, for the winter half year commencing Oct. 1st, 1856. By BENJ. H. LEMON, M. D., formerly House Surgeon.

Beginning with a general list I will include only those diseases, accidents, and operations of the more grave character, viz:

Anchylousis, various points; amaurosis; abscess, acute, in thoracic parietes, chronic of pelvis, and in various situations; burns from the clothing, three deaths from this cause; cataract, and operation, two cases; cystitis; caries of bones, operations for, including spine; contusions; caries of spine, with coxalgia; concussion of brain; cancer, including enchondroma of the maxillary bones of the left side, involving also the parotid gland; epithelial cancer of hand and lip; medullary cancer of the eye, also including the parotid, the fungous growth from the orbit being enormous.

Dislocations: two of the humerus downward into the axilla; one of the radius and ulna backward; epulis, or fibro-plastic growth on the superior maxilla, operation; ectropion, and operation; erysipelas phlegmonous; fractures; of the clavicle, single: of the humerus, single: radius and ulna, single: four; radius and ulna, single and comp., one; of the spinous processes of the ninth, tenth and eleventh dorsal vertebræ: neck of femur, single, three; shaft of femur, single, three; shaft of femur, double, compound, one; of the tibia and fibula, single, compound, one; of the tibia and fibula, single, two; frost bites; fistula-ani; gonorrhœa, simple, and complicated with stricture, with epididymitis, &c., &c.

Hydrocele, three cases, two operations; femoral hernia, strangulated and operation, recovery; necrosis of femur; paronychia.

Ophthalmia, including amaurosis, conjunctivitis acute and chronic; do sclerotitis, cataract, and two operations; iritis syphilitic; ulcer of cornea and hernia iridis, staphyloma, opaque cornea, albugo, nebula, leucoma; synovitis, three cases of knee joint; acute, spina bifida; synovitis, with hydrarthrosis; stricture of the membranous portion of the urethra, operation, successful result; strabismus, operations; syphilis in the primary, secondary, and tertiary stages of evolution; talipes, including first, second and third classes, namely, varus, valgus and equineus; synovitis and ulceration of the cartilages and caries of the articulating surfaces of the bones forming the knee joint: amputation at middle of the thigh, and fatal result; ulcers, chronic, from the effects of lightning: from varicose veins: syphilitic, syphilitico-phagedænic

scrophulous, &c.; varicocele, operations; varicose veins, operations for their relief; vesico-vaginal fistula, operation, and successful result; wounds: gunshot, &c., &c., contused, lacerated, from various causes.

Died, effect of burns, three; necræmia from purulent absorption after amputation of thigh, one; croup, one; total, five.

CASE I.—Ancient, Irreducible, Femoral Hernia, become Strangulated. Operation the ninth day after strangulation occurred. Successful result. Character, "Entero epiplocele."

Mrs. Cath. Welch, æt. 50 years, Irish, a widow, much emaciated and in broken health.

Admitted Oct. 7th, 1856, to general surgical ward, female department.

Has an ancient femoral hernia of the right side, always partially reducible until nine days ago. In consequence of lifting too heavy a weight it suddenly became much enlarged, and resisted all her efforts to return it. A physician being called, applied himself to reduce it by the means generally adopted in such cases, but found himself unsuccessful. Symptoms of strangulation of the passive character ensuing, ordinary measures were adopted, that are supposed to favor the return of the gut. The protrusion continuing, however, the bowels not acting, the symptoms becoming more severe, and the patient growing exhausted, time wore away until the eighth day of incarceration, when stercoraceous vomiting supervened, and she was brought to the hospital.

On examination, a large oblong tumor was found occupying the right inguinal region, about six inches in its long, and three in its short diameter.

Having administered chloroform, a moderate quantity of which caused gradually a state of complete anæsthesia, without the usual struggling and delirium. Dr. Hamilton proceeded to operate: present and assisting, several members of the profession and the class from the Medical College.

The integuments were divided in the mesial line, in the direction of the long diameter of the tumor. The external epigastric artery bled little and required no ligation. The several successive layers of fasciæ were then divided by fine strokes of the scalpel, until the sac came into view, incision of which was followed by a copious discharge of yellow serum; both fasciæ and peritoneal sac were thickened. On laying open the sac a large amount of omentum presented itself, and posteriorly, and to the internal side of the omental mass, the intestine, of which the major portion of the tumor was composed, minute inspection now discovered extensive lymph exudations

gluing the intestines together; also some very old adhesions; enlarged state of the veins distributed through the omentum; omentum itself of a pink color, and quite hard; and the strangulated knuckle of intestine of a dark claret color. The strictures, of which there were two, at the crural ring, caused by Gimbernaut's ligament and the falciform border of the pubic portion of the fascia lata, anterior layer, were pretty freely divided, cutting upward and a little outward.* The amount of protruding viscera being very considerable, a portion of the omentum, which was adherent to the sac, was cut away that the remaining contents might be more conveniently accommodated, and to lessen the danger of the inflammation continuing in the omental mass after its reduction.

Having ascertained that the strictures were relieved, the protruding intestine was gently returned within the cavity of the abdomen, going back with a gurgle, the omentum following. The lips of the wound brought together by three sutures, a pledget of lint, wet in cold water, was applied, and half a grain of morphia administered.

I saw her, at the request of Dr. Hamilton, six hours after the operation; the bowels having moved naturally, had evacuated a very large quantity of liquid fecal matter, apparently the same as that vomited previous to the operation.

Directed a change: a clean sheet to be drawn down from the head, as the soiled one was pulled toward the foot of the bed, thus preventing much disturbance and retaining the recumbent posture so necessary. Morph. half a grain this evening.

Oct. 8th. Slept little during the night. Pulse full and slow; tongue brown and dry; abdomen painful.

Repeat morphia; fomentations to abdomen.

9th. She looks brighter; slept well; pain in abdomen subsided.

Repeat morph.

10th. Dressed wound; improving.

Morph. ut ante.

11th. Comfortable; slept well; no stools since the seventh.

Ordered castor oil, half an ounce.

Dressed the wound, part of it having united by *primary adhesion*.

12th. Bowels have not responded.

Directed sal. Epsom, half an ounce.

* The reason for this is not assigned.

13th. Bowels relaxed last night.

Took out sutures and dressed the wound.

From this time she regained her appetite, and convalesced rapidly under tonics and a generous diet, requiring only tepid water enemata to regulate the bowels; by the first of Nov. wound had entirely cicatrised. Patient dismissed.

"In females hernia occurs most frequently from the twentieth to the fiftieth years: at fifty years the proportion is one in six.

"Average amount of mortality, nearly one-half the cases operated upon in the time of Sir Astley Cooper.

"Of seventy-seven cases operated upon by him, as reported by himself, thirty-six proved fatal; and of five hundred and forty-five cases recorded in the journals, and collected by Dr. Turner, two hundred and sixty are reported to have died.

"Later: Mr. Luke states that he has operated in eighty-four cases of hernia; in twenty-five of these the sac was opened, and eight died; in fifty-nine the sac remained unopened, and of these seven only proved fatal.

"Mr. Luke has shown that the ratio of mortality increases greatly in proportion to the length of time that the strangulation is allowed to continue. Of sixty-nine cases of strangulated hernia operated on within the first forty-eight hours of strangulation, twelve died; whilst of thirty cases operated on after more than forty eight hours had elapsed, fifteen died: in the former, 1 in 5.7: in the latter, 1 in 2.5.

"Mr. Erichsen also says, I have known a coil of intestine that had been but eight hours strangulated before the operation was performed, so tightly constricted as not to regain vitality after its reduction."—*Erichsen's System of Surgery*.

In the above case, therefore, the reasons for opening the sac were sufficiently urgent, namely, the long continuance of strictures, and the severity of the later symptoms generally.

CASE II.—*Syphilis in the Secondary and Tertiary stages of evolution. Pseudo-membranous Croup and Death. Necropsy. Subject, a girl aged 15 years.*

This case presents anomalies exemplifying the extreme in each disease: the former incident generally to adult age, when not hereditary.

The latter (croup,) being obnoxious chiefly to those of ages ranging from ten months to five years, rarely occurring after the tenth year.

Mary Jane Burns, æt. 13 years. A short, stout, dark complexioned Irish girl, lymphatic temperament, from the Rochester Orphan Asylum.

Admitted to the Buffalo Hospital, Oct., 1854, with supposed scrophula, having a sore under her chin, and another at the inner angle of the right eye, causing fistula lachrymalis. The diagnosis was syphilis in the secondary stage, her previous history, (unsatisfactory,) youthful age, and some adverse opinions seemed to negative its correctness.

It was sustained, however, by the subsequent symptoms, as an account of the case, after the lapse of two years, will fully substantiate: the pathognomonic signs of syphilis in the secondary and tertiary stages of evolution being well marked.

Present condition, Oct., 1856. Countenance pale, clay colored, waxy appearance; anorexia, secondary signs, a pustulo-crustaceous ulcer of a ser-piginous character, under the chin, about one inch wide and three inches in length, with brown and yellow crusts on a dark claret-colored base; a sore of similar character at the inner angle of right eye and fistula-lachrymalis; enlargement of cervical glands; confluent herpetiform eruption on the nates and thighs (inside.)

Tertiary Signs Nasal ostealgia; nose flattened, obstruction of nares; cephalalgia; excoriated ulcer of throat and velum palati; aphonia; osteocopic pains, chiefly of the anterior aspects of the tibiæ, and of the ulnar lateral aspects of the ulnæ. The parenchymatous inflammation causing nodular enlargements of these bones, imparting to them a distorted and bent appearance.

She died suddenly in the night of the fourth of December; a patient in an adjoining bed, alarmed by her struggles, called the Sister nurse, who found her moribund; dyspnoea had been observed the day previous, on being questioned, said she had taken cold.

Necropsy disclosed a yellowish-white pseudo-membranous exudation of firm consistence, lining the parietes of the larynx, trachea and bronchiæ; the examination was pursued no further.

Did the syphilitic cachexia predispose to the induction of croup?

CASE III.—*Gonorrhœa, with Epididymitis supervening at the end of four months, without the cessation of the urethral discharge. Treated by diet, recumbent posture, cubeba, demulcent drinks. Cure in eight days, the Gonorrhœa disappearing previously to the resolution of the testis.*

Jacob Baker, æt. 21 yrs., German laborer; short stout, florid complexion.

Entered hospital, Dec. 2d, 1856, general ward; says he contracted his disease about four months ago; has had no treatment; kept about his work; discharge constant. Several days ago he felt pain in one of his testes, with sense of weight in perineum, and organ began to swell, became hard and very painful: this increased, until finding himself incapable of further exertion, he applied for relief. The whole testis is now involved in the inflammation; the epididymia, particularly the globus major portion and the spermatic cord being very painful; testis is about the size of a hen's egg. An abundant yellow puriform urethral discharge continues.

Directed to lie in bed; saturnine lotions, cubeba, one drachm, three times daily: increased the third day to two drachms, three times per diem; demulcent drinks; half diet.

The testicle enlarged no further, but on the contrary began rapidly to diminish in size, and by the eighth day of treatment had regained its normal condition, the cord remaining somewhat hard. The gonorrhœa had disappeared, however, previously to this. He remained in the house some days after this, without a recurrence of any of the symptoms. Dismissed.

"Ricord says that epididymitis, like the other symptoms of blennorrhagia, is neither a repercussion nor a metastasis. That the quicker the disease is arrested, the surer are we of immunity from consecutive accidents."

The article in *Cooper's Surgical Dictionary* on orchitis says, "This disease most frequently arises from previous gonorrhœa, and especially when the discharge has been injudiciously suppressed by astringent or saturnine injections into the urethra. When the tumefaction commences the pain and burning in urinating ceases, and the discharge retires altogether; but all these symptoms return so soon as the inflammation in the testicle is removed.

"Strangury, to an alarming extent, sometimes accompanies the swelling and stopping of the discharge, and hence many judicious surgeons invite the return of the secretion from the urethra, thus removing the hernia humoralis more speedily."

This case is at variance with these statements:

First, No injections had been administered.

Secondly, The orchitis supervened during the continuance of the discharge.

Thirdly, Pain and burning did not cease on tumefaction, nor did the discharge return after it ceased and the testitis had subsided.

Fourthly, It is fair to assume that the resolution of the inflamed testis was hastened by the cure of the urethritis and removal of irritation from this cause.

In support of this see following case to same effect.

CASE IV.—Gonorrhœa. Testitis supervening at the end of three weeks. The urethral secretion continuing. Treated as in the preceding case, with the addition of injections of the sol. arg. nit. chrys. Cure of the Urethritis in ten days, and resolution of the Inflamed Testis at the end of the second week of the treatment.

Mr. Simon S., æt. 30 years, unmarried; a strong man of sanguine temperament, employee of N. Y. C. R. R. Co., at Niagara Falls, admitted January 30th, 1857, to a private ward; says he contracted gonorrhœa about six weeks ago, and has been treated by a surgeon at the Falls, without benefit he thinks. Three weeks ago, the discharge being as copious as at any time, his right testicle grew inflamed; having taken medicine the secretion has ceased for the last week, until the day before his admission, when it recurred afresh, and with an aggravation of all his symptoms: burning pain on urinating, (ardor urinæ) desiring to do so more frequently; sense of weight and aching in perineum from before toward the anus; increased tenderness and swelling of testis.

His condition growing worse, determined him to apply to the hospital, in Buffalo, for relief.

The organ is now about the size of a large hen's egg; the epididymis and spermatic cord especially, hard and painful to the touch. The urethritis not being deemed sufficiently acute to contraindicate the use of injections, the sol. arg. nit. chrys., one grain dissolved in four ounces of water, was directed to be thrown up the canal four or five times daily, and retained for half a minute; cubeba, two drachms, three times daily; demulcent drinks; half diet; the recumbent posture, and the organ supported in a manner that its weight may not depend from the cord.

Under this treatment the urethral secretion disappeared in ten days, and

by the end of the second week the inflamed parts had regained their normal state.

Dismissed February 17th. I heard from him some months subsequently, none of the symptoms had returned.

"Ricord says that the greater part of the symptoms to which blennorrhagia can give rise, never manifest themselves before the end of the first week, and it is from the second week, and most generally later, that we see these symptoms take place. Further, that the greatest number of these symptoms manifest themselves only in those cases where no treatment, or an insignificant one, has been made.

"Mr. Erichsen when writing on gonorrhœa, says of injections, much and unfounded prejudice exists against their use in the minds of many. That the bad consequences, such as stricture, inflamed testicle, &c., which have sometimes been referred to their use, have been rather due, either to the long continuance and to the severity of the disease itself, than to the remedies employed, or to their application at too early a stage, or of too great strength. It is in long standing cases of gonorrhœa in which the discharge continues for months, or even years, that stricture results, not in cases of ordinary duration, and in these it is the result of chronic inflammatory thickening of the mucous membrane, and has no more to do with the injections than the copaiba or salines the patient may have taken.'

"Gonorrhœal inflammation of the testis invariably affects only one testis, and commences in the epididymis, whence it extends to the body of the organ.

"It usually occurs in those individuals who have a lax and long pendulous scrotum. It seldom sets in before the third week after the occurrence of the gonorrhœa, but may occur at any period during the continuance of the discharge, though it is more frequent between the fifth and sixth weeks, than at any other time. In many instances it is referred to some slight injury—a blow or squeeze received during the continuance of the discharge; but in other cases it would appear to arise from extension of inflammation along the ejaculatory ducts, and in others again to a kind of metastasis of the morbid action from the urethra and the testis. The fact of the disease commencing in the epididymis may be advanced in support of the first opinion, whilst the fact that the discharge usually ceases when the inflammation of the testicle comes on and returns as it subsides, may be adduced in support of the doctrine of its metastatic origin.—*Erichsen's Surgery*.

(To be Continued.)

ART. V.—*Report of Mortality in Buffalo for the month of May, 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Asthma.....	1		1
Aneuriam.....	1	1	
Accident.....	1	1	
Apoplexia.....	2	2	
Asphyxia Immerarum.....	1	1	
Cephalitis.....	3	1	2
Croup.....	4	4	
Dentitio.....	2	1	1
Diarrhoea Chronica.....	3		3
Dysenteria.....	1		1
Debilitas Senilis.....	6	3	3
Epilepsy.....	1	1	
Erysipelas.....	1	1	
Eclampsia.....	19	11	8
" Puerperarum.....	1		1
Enteritis et Perforatio Intestinalis.....	1	1	
Febris Typhoid.....	6	3	3
" Scarlatina et sequela.....	18	11	7
" Nervosa.....	2	1	1
" Puerperarum.....	1		1
" Intermittent.....	1	1	
Hydrocephalus.....	6	4	2
Hepatitis.....	1		1
Hyperæmia Pulmonalis.....	3	2	1
" Cerebralis.....	2	2	
Ignotus.....	28	18	10
Intemperance.....	2	1	1
Morbus Cordis.....	5	2	3
Mania Puerperarum.....	1		1
Marasmus.....	5	4	1
Paralysis.....	2	1	1
Pertussis.....	1	1	
Phlebitis.....	1		1
Pyæmia.....	2		2
Pneumonitis.....	15	11	4
Peritonitis.....	2	1	1
Scrophula.....	2	1	1
Still-born.....	2	2	
Suicide.....	2	1	1
Syphilis Congenital.....	2	1	1
Tonsillitis Chronica.....	1		1
Tuberculosis Pulmonalis.....	20	11	9
Varicella.....	1		1
Total.....	182		

SEXES.

Males, ...	107
Females, ...	75
Sex not given, ...	0
Total, ...	183

AGES.

Still-born, ...	2	Between 20 years and 30 years, ...	16
1 day, ...	3	" 30 " " 40 "	13
1 day and 30 days, ...	12	" 40 " " 50 "	5
Between 1 month and 6 months, ...	23	" 50 " " 60 "	11
" 6 months and 12 "	25	" 60 " " 70 "	5
" 1 year " 3 years, ...	28	" 70 " " 80 "	4
" 3 " " 5 "	15	" 80 " " 90 "	1
" 5 " " 10 "	6	" 90 " " 100 "	0
" 10 " " 20 "	13	" 100 " "	0
Total number under 10 years, ...	114	Total number over 10 years, ...	68
Ages not given, ...	0	Total, ...	182

NATIVITIES.

American, (white,)	95	Welsh, ...	1
" (colored,)	3	French, ...	4
German, ...	35	Scotch, ...	2
Irish, ...	18	Holland, ...	1
English, ...	4	Country not given, ...	18
Canadian, ...	1		
Total, ...	182		

ECLECTIC DEPARTMENT,

AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

New York Academy of Medicine.—Puerperal Fever.—On recommendation of the *Section on Obstetrics*, the subject of puerperal fever was brought up for discussion by Dr. John W. Francis, chairman of the committee.

Dr. Francis said: I find myself chairman of the committee on the subject of puerperal fever, and, thus appointed, am necessarily to open the discussion on that important disease. I shall do so with brevity, as I know not what particular points the Academy purposes the investigation to be carried. This disorder is so minutely described and illustrated in books, that all who now hear me, must be familiar with its symptoms and its treatment. I have, therefore, little of novelty to announce. Its inflammatory character as a general fact; its rapid course in most instances; its great malignity under peculiar circumstances, are acknowledged truths. I will, on these accounts, as well as to save time, venture to affirm some things which, perhaps, may not be found in the pages of every author on puerperal fever. I am not willing that this disorder should be restricted in its seat, to inflammation of the peritoneal lining, thus nosologically denominating the disorder "puerperal peritonitis." The disease in many instances, involves the substance of the womb and the intestines, and even contiguous viscera. We are told the complaint often sets in several days after the parturient condition is over. I have known it to assume the most malignant character within thirty-six hours after delivery, involving the womb, intestines, and even the bladder, and to terminate fatally with most disastrous destruction at the end of the third day. Upon examination, the autopsy has shown the womb contracted less than one-third of what it was in its full gravid state, its perimetria, one and a quarter, or one and a-half inches in thickness, the inner lining overloaded with flocculi. This condition has been brought about from a variety of causes, all leading to a depressed condition of the patients a bad habit, vitiated air, and the concurring causes which bring on the typhoid form of this fever. I am satisfied of its contagious nature, from the authority of Gordon, and from what I have seen both abroad and at home. I will not trespass by the detail of circumstances in support of this view, at this

time. I hardly think a member of the Academy of five year's practice, is among us, who has not seen this truth verified in hospital practice, perhaps, too, in the occurrence of puerperal fever in its sporadic form. In this age, when contagion is by many discarded as a cause of disease even in scarlet fever, and in measles, we must expect such incredulity would reject its influence even in the Lying-in-Hospital. I will add no more at present, but wait upon the discussion, for I apprehend that it is especially on this controverted subject of the specific character and contagious quality of puerperal fever, that the arguments of members will be expended.

Prof. Joseph M. Smith read an elaborately written paper, on the *Causes and Modes of Propagation of Puerperal Fever*.

The views of medical writers are divided as to the pathology of puerperal fever; one class holding to the opinion that the disease is an idiopathic fever *sui generis*; and the other that it is essentially a local inflammation, taking the form of peritonitis, metritis, metro-peritonitis, or uterine phlebitis; the former of these opinions have lately been revived, and, with the exception of imputing to the disease a specific contagious attribute, has received the support of able contributors to obstetric pathology.

The opinion of authors is also divided in regard to the nature of the morbid agent; one class contending that it is a specific contagious principle, elaborated within the body by a specific vital process; the other, that it is a miasm or poison, formed by the chemical reactions which take place in the exhalations, and other matters excreted or discharged from the human body and retained in close apartments.

In rejecting the opinion that puerperal fever is a disease *sui generis*, we must, also, reject the idea of its propagation by a specific contagion. That the disease is communicable, there is no doubt; but it is so through the agency of a poison generated in a mode totally different from that peculiar to small-pox and measles.

Prof. Smith then proceeded to consider the *Special Etiology* of puerperal fever, under the following heads:

1. Causes of puerperal fever in public institutions.
2. Origin of sporadic or spontaneous puerperal fever.
3. The miasm of typhus fever produces puerperal fever.
4. The miasm of puerperal fever produces typhus fever.
5. The miasm of erysipelatos patients produces puerperal fever.
6. The miasm of puerperal fever produces erysipelas.
7. The emanations from bodies, examined after death, produces puerperal fever.
8. Puerperal fever and erysipelas are generally concomitant epidemics.
9. Are puerperal fever, erysipelas, and typhus, one and the same disease?
10. Extreme susceptibility of puerperal women to the effects of idiomiasm.

The conclusion at which Prof. Smith arrived, after full consideration of the above propositions, are,

That puerperal fever sometimes arises from the noxious air generated from the foul discharges of puerperal women in crowded and ill ventilated lying-in-hospitals; sometimes from the emanations of patients laboring under typhus fever, erysipelas, and gangrenous diseases; sometimes from the emanations from the human body dissected after death; and sometimes from the

absorption of putrescent matters lodged in the uterus and vagina after parturition.

It would appear, also, from this inquiry, that the miasms of typhus, erysipelas, and puerperal fever are severally capable of producing any one, or all, of these diseases; and that they may attach themselves to the persons and clothing of midwives and physicians, and thus be transported from these sources, to the chambers of lying-in-women. The more ordinary form of disease, induced by the febrile effluvia in question, is typhus and its modifications, typhoid fevers; while puerperal fever, and hospital erysipelas, are but varieties of that disease, taking their forms from the peculiar predisposing conditions of the system.

The following facts are important:

1. Let the physician take care.
2. When it breaks out in a hospital, thorough resort to disinfecting agents and ventilation, and dispersion of patients is necessary.

Prof. Clark said: I am not so well prepared this evening to speak upon this question as I hoped to have been. I have not had the time to study my own papers; the subject has occupied my thoughts for twenty years, and commands my earnest attention at this moment, for since the last meeting of the Academy, the disease has appeared at the Bellevue Hospital; two patients have already died of it and seven are now under treatment. I name this incidentally, as I may allude to it again in speaking of the treatment.

With reference to the points that have been made thus far in the discussion, I have little to say; I am obliged to concur with Drs. Francis and Smith, in regard to the communicability of puerperal fever, whether by miasmatic infection, or by contagion, is a matter of far less importance than the fact that it can be conveyed by the physician. The mode of the conveyance has excited a great deal of speculation; but the poison has never been isolated. It is not known whether it is imbibed by the cuticle; or, as Tyler Smith has said, is breathed into the lungs, and through them, entering the blood, and thence coming forth as a halitus; or, whether it is carried in the clothes or hair.

1. As to its connection with typhus. At the present time, we have puerperal fever at Bellevue; but there is not a single case of typhus fever in the whole house: either in the male or female divisions. There has been no case on the female side for two months, and none on the male side for one month; and in the whole house, there have been only five or six marked cases during the whole of the last six months.

The epidemic, of which Dr. Vaché has given an account, in 1840, perhaps the most severe that has ever visited the Institution, was not preceded, attended, or soon followed by any marked increase of typhus or typhoid fever. The same may be said of the puerperal fever in 1851 and 1852. On the other hand, the severe typhus epidemic of 1846-7-8, came and went without any unusual occurrence of puerperal fever. Dr. Reese, will, I have no doubt, bear testimony to the latter statement. It would seem, then, that at Bellevue there are no fixed relations between these diseases.

I am aware that puerperal women have been placed in beds near those who have had typhus fever, and have died of puerperal fever; but unless

these cases are adduced in sufficient numbers to balance the cases on the other side, they may be but coincidences.

No relation has been established between the typhus and puerperal fevers, as far as the City Inspector's reports are concerned. We have these reports from the year 1804; but from the year 1804 to 1829 or 1830, the number of deaths from these affections was annually too small to be of much value. It is impossible, without access to the City Inspector's office, to make an exact comparison from these reports; as all the persons dying from puerperal fever, "childbed," "convulsions," and from "abortion," are all classed under one head. But as those from convulsions and abortion bear pretty nearly a fixed relation to the population, we may assume that the fever causes the principal changes in the number from year to year.

The following figures will show the number of deaths from puerperal diseases, and from typhus and typhoid fevers, from 1830 to 1853:

In 1830, we had	59	puerperal, and	53	typhus deaths.
" 1831, "	36	" "	54	"
" 1832, "	60	" "	84	"
" 1833, "	39	" "	62	"
" 1834, "	61	" "	106	"
" 1835, "	61	" "	47	"
" 1836, "	76	" "	117	"
" 1837, "	64	" "	238	"
" 1838, "	40	" "	104	"
" 1839, "	29	" "	97	"
" 1840, "	66	" "	144	"

And so on, till we come to the year 1847, which must be regarded as the *test* year.

In 1847, we had	94	puerperal, and	1396	typhus deaths.
" 1848, "	147	" "	948	"
" 1849, "	138	" "	602	"
" 1850, "	152	" "	472	"
" 1851, "	166	" "	1104	"
" 1852, "	155	" "	758	"
" 1853, "	147	" "	541	"

The numbers will sometimes be found to increase together; but the proportions in which they increase and diminish, show very few analogies between the two diseases.

Prof. Clark here drew a contrast between the symptoms, duration, and lesions of the two affections, showing the wide differences which exists between them.

The relation of puerperal fever to erysipelas, at Bellevue, has long been remarked. My impression is that there is a *relation* between the two; this is the prevailing opinion there. A few days ago, when the puerperal fever broke out there, it was ascertained that erysipelas was prevailing to some extent in the surgical wards.

In looking over the City Inspector's report of deaths for fifty years, it is found that from 1804 to 1830, the ratio of mortality from these diseases is

very variable; the numbers are, however, too small during this period to be of much value; but for the last twenty years, when the number from each is considerably increased, it will be remarked that they show a decided tendency to increase together, and to diminish together, the ratio of mortality varying but little.

Hospital Gangrene differs from erysipelas, probably more in its appearance and results than in its nature. It is, perhaps, erysipelas intensified, and somewhat modified in the tendency to spread over the body. But as the two occur under the same circumstances, and as they certainly have close alliances, what has been already said of one can hardly fail to be true of the other.

Pathology.—I am compelled to withhold my assent to the doctrine that this is a *fever*, and a fever only, under any circumstances. I have not yet seen a single puerperal woman die of an acute febrile disease of short duration, such as is usually called puerperal fever, in whom there could not be found, on post-mortem examination, some lesion of an *inflammatory* character. Dr. Gooch has expressed the opinion that this *fever* may occur *without lesions*. He says: "The experience of the last few years has taught us about peritoneal fevers (he prefers to call them peritoneal rather than puerperal) that they occur in their most malignant form and leave few or no vestiges in the peritoneum after death." Dr. Simpson has expressed the opinion that the disease occurs occasionally without lesions. "Occasionally," he says, "though very rarely, no inflammatory lesion whatever can be found in bodies of patients who have died of puerperal fever. Dr. Locock has observed several cases of this kind, and in the practice of the late Dr. Beilby I saw one very marked and rapidly fatal case of puerperal fever in which my colleague Prof. Bennett was unable to detect anywhere in the abdomen or uterus, its appendages or vessels, any trace of inflammatory action or effusion." Tyler Smith regards it as, in some cases, an *inflammation*, and in others a fever. I would say that puerperal fever has *four principal* lesions, and many of a secondary character.

1. Inflammation of the peritoneum.
2. Inflammation of veins of the body of the uterus.
3. Inflammation of lymphatics of uterus, veins not involved.
4. Inflammation of inner surface of the uterus, or endo-metritis.

I believe in every case where a full examination is made—I think in every case—one of these lesions will be found. In all cases where I have had an opportunity of examining, one has been found.

The first variety is the most common. It is found in the different stages of congestion, effusion of lymph, or the effusion of pus. One of these conditions is found in the great majority of the cases which I have examined.

2. The number of the cases in which *inflammation of the veins* exists is small. I have met with it in a few cases. Cruveilhier, in the *Hospital Maternité*, met with it in very few cases; seven or eight in the two years add a half. I have here the report of two cases which illustrate this form of the disease. The general character of this lesion will be better understood by the examination of the plates. (From Cruveilhier's *Pathological Anatomy*.)

3. *Inflammation of the Lymphatics.*—This is more common than inflammation of the veins. It is very often seen, to a limited extent, often met

with in this limited extent when the chief lesion is peritonitis. This fact was first pointed out to me by Dr. Markoe, of this city, some years ago. At that time, however, it was supposed that it was the veins of this part that were the seat of the inflammation, but, on careful examination, it appears to be in the *lymphatics*, and not in the veins.

If Cruveilhier can be trusted (and I have met with confirmation of his opinion), when pus is met with, and can be traced to the lymphatics, the pus does not enter the circulation so as to destroy life, the lymphatic glands seem to filter it out, and prevent its transmission into the circulating blood. At least, pus can be traced in these cases into the lymphatic glands, but if the gland itself is not disorganized by the purulent deposit in its structure, it can not often be found in the tubes going off from the glands.

4. The next form of disease is that which Gooch, Simpson, and Tyler Smith regard as independent of anatomical lesion. The view which I wish to present of that class of cases is that they are probably all, in reality, pyæmia resulting from inflammation of the inner surface of the uterus. In order that what I have to say on this point may be better understood, we will consider one or two points in the anatomy of the uterus after parturition. I have here the uterus of a woman who died of pleurisy, ten days after delivery, in the practice of Dr. Grimsom. I have not thought proper to bring into this room, where there are so many practicing accoucheurs, a fresh specimen of the disease in question, though I could have done so. In 1840, it seemed to me I could demonstrate that there was no lining membrane to the uterus, but that the uterine sinuses opened on the free surface of the uterus. These open mouths can be seen in a good light in this specimen, entirely uncovered by any membrane. I can pass this instrument (a probe) into one of these open mouths, and out of the cut surface of the uterus, and if I was disposed to make a patient dissection, I could trace them into the veins going into the general circulation.

These sinuses remain open, or rather openable, for at least ten days. Why do they not bleed? I do not know as any one has made an exposition of it. If I see it correctly, these sinuses are guarded by a valvular opening like that of the ileo-cæcal valve. There are two folds, the longest is the innermost one; through this innerfold there is a muscular fibre well marked, and, also, a smaller muscular fibre running through the shorter lip; these muscular fibres are continuous with the muscular fibre of the body of the uterus; when the muscular fibre of the uterus is well contracted, the shorter lip is drawn down on the inner one so that no blood escapes. When the muscular tissue is relaxed, the mouths open in this way (illustrated by two pieces of paper, the one overlapping the other, like the two parts of the ileo-cæcal valve, and the ends approximated) thus it is that bleeding occurs when the uterus is relaxed, and hence the necessity of having the uterus contract to prevent hæmorrhage.

If the open body of one of these sinuses be lifted, a sort of sac will be found one-sixteenth of an inch or so in depth; and, looking toward the wall of the organ, another little mouth, sometimes two or more; whether that has a muscular fibre I am unable to say.

Now, sir, the point I make, is this:— Inflammation of the inner surface of the uterus is, also, inflammation of the valvular mouths of the uterine sinuses, since they are really a part of this inner surface; hence endo-metritis, as it seems to me well to denominate it, is of necessity a limited phlebitis, and

inflammation of this inner surface of the uterus is of common occurrence, in one or other of its forms. Cruveilhier has described it as attended by an exudation which is soft, vascular, and areolar, the meshes of which are filled with blood clots. I have seen the exact copy of what he represents in Plate VI, of Book 4; and can state that the singular appearances there illustrated are due to fibrin, pus, and blood; the first forming a velvety surface on the interior of the uterus which holds in its fibres the other two, and that there is no proper vascularity in this exudation; it is nothing more than one of the least frequent of the results of the endo-metritis. The more common results of the inflammation, are exudations of a creamy consistency varying in color from a pale ink, through a brick dust to a brownish red, or sanious hue, with or without a firmer fibrinous layer, in contact with the uterine surface; in rare instances the color is the dark green, represented by Cruveilhier.

When this endo-metritis exists with the symptoms of puerperal fever, though peritonitis be absent, and though pus be not found in the lymphatics or veins of the uterus, yet we are not at liberty to infer that the disease is a fever and nothing else. Here is a source of purulent contamination. That pus is not found in the veins is not proof that it does not exist in the circulation; formed within the mouths of these sinuses, it would be readily washed into the circulating blood and produce the symptoms of pyæmia. Indeed, the proof of such contamination I have seen in the deposit of pus within the tissue of the liver.

I do not mean to say these four lesions are independent of one another. I do not mean to say that where there is found lymph effused, where there is peritonitis, or where there is inflammation of the lymphatics, there is no endo-metritis; for this endo-metritis is found in almost all cases; it is very rare for endo-metritis to occur without other lesions; again, it is not common for the neck of the uterus to have the same change that is found in the body, for the neck will often be found healthy, while the body is changed; this shows that the neck is subsidiary, and does not perform the same functions as the body, or, at least, is of different structure. I have here a summary of all the additional lesions I have noticed as far as I am able to judge.

1. In most cases the fallopian tubes are found more or less filled with pus. 2. It is very common for serous membranes to be involved; the pleura is rarely free from hyperæmia; the pericardium is often injected; the stomach is almost always thickened and softened if not of a red color; the intestines are more or less hyperæmic, and hence the diarrhoea, which is more common than in other forms of peritonitis; the spleen is not commonly changed except where there is some complication; the kidneys are not involved in the diseased action, at least they do not give any evidence of being involved; the brain is almost always implicated, there being fluid in the cavities, and the vessels of the brain bleed freely when cut. My own researches do not enable me to demonstrate any very striking changes in the blood, it is coagulated in the heart and larger vessels.

The larger veins are often stained by the coloring matter of the blood after death; in one case, the autopsy was made one hour and a half after death, in order to see whether this staining was before or after death, no stains were observed; where the autopsies have been made within six hours after death there have been no stains. We can not demonstrate these changes in the blood which nature exhibits. In this respect, pathology is far be-

hind nature. The graafian vesicles are often of a muddy color, as if stained with pus; the ovaries are frequently inflated with serum, sometimes with pus. The primary lesions are in the organs of generation; the secondary are in the blood, and are found, indeed, in almost every organ of the body.

Dr. Reese remarked that a law should be enacted to prevent persons from attending on puerperal women, after attending cases of erysipelas, hospital gangrene, or autopsies. He had never seen a case which justified the view of this disease being contagious. He had not found local lesions sufficient to account for its fatal results; had twenty-nine cases in the month of March, while in charge of Bellevue; and, in the first five, puerperal fever came on in one to four hours after confinement. He gave the wards up to an assistant, who had five cases in two days and two nights; this satisfied Dr. Reese that he had not communicated the disease, and he again resumed the charge of the wards; he lost five out of twenty-nine cases. Phlebitis and toxemia occurred in two; he believes the disease to be epidemic. We have had illustrations here; when it prevailed along the east and west sides of the city, while in the northern part it was scarcely heard of.

Prof. Smith said he would like to make an enquiry of Prof. Clark, as he did not himself enter into the pathology of the question, except to say, that the disease is a fever, and not a phlegmasia, and that the lesions which are found are but complications. Prof. Clark does not discriminate between typhus in males and typhus in females. If he had excluded the typhus in males, perhaps the results would have been more equal. This exclusion of the males would alter the result.

These statistics are liable to lead us astray, unless we exclude the circumstances that modify the disease. I did not attempt to identify the diseases, typhus, erysipelas, puerperal fever, etc. I put it in the form of a query, in attempting to explain why typhus occurred, and puerperal fever did not. The legitimate and ordinary form of fever is typhus; where there is nothing to produce a modification, typhus and typhoid are similar idiopathic fevers, connected as one and the same disease, but meteoration at certain seasons, especially affects female constitutions, and under this influence another form of disease is produced.

Rokitansky regards typhus and puerperal fever, as incompatible. But there was one case in Paris, where the intestinal lesions were demonstrated in a case of puerperal fever.

I have adopted the view, that this is a fever, and the local lesions are but complications. According to Prof. Clark, however, there is no case in which some lesion does not occur. Prof. Ossiander was the first to notice cases without lesion. Dr. Locock says, such cases are rare, yet they do occur. Dr. Bennett explained a case minutely, in which not the slightest lesion was found. Admitting endo-metritis to exist in all cases, it does not, to my mind, prove that this is not an idiopathic fever. Are the lesions sufficient to destroy life as rapidly as we see it? Some secret poison must be at work in the blood, poisoning the patient. When Dr. Reese related the case of Dr. Forrester attending his patients, I was struck with its analogy to the cases where several physicians attended a case of erysipelas, and afterwards attended puerperal women, who suffered from the disease.

Prof. Clark.—I will cheerfully answer Prof. Smith's inquiries. As to typhus occurring with puerperal fever in females, I am not able to give any additional facts. We know that typhus fever takes its full proportion

of females,* and in epidemics more females are lost, because females are more about the sick. I know of nothing in the history of New York which would take epidemics out of this rule. In the severe epidemic of 1847, the number of deaths among females fell somewhat short of that among males. I can, if necessary, obtain the statistics on this point, but I believe the facts will be found substantially as I state them. I am glad Prof. Smith has given me an opportunity to explain a little more fully the purport of some of my remarks. I suppose I was understood to say that endo-metritis has been observed by every one, though the name is, perhaps, here used for the first time. What I intended to say is this, that I have seen, I believe, the cases which Gooch, Simpson, and others describe as puerperal (or peritoneal) fever, without lesions, and have never failed to find the evidences of endo-metritis. I did not intend to express the idea that this limited amount of inflammatory action could, of itself, by the force of its local irritation, produce this terrible fever, and destroy life so rapidly, but that this inflammation is a purulent contamination of the blood, in manner already explained, and that the patient dies, not of endo-metritis, but of pyæmia. I have here a case reported at great length, in which death occurred after six days of illness. There was no peritonitis, no inflammation of the lymphatics or veins in the substance of the uterus; but there was endo-metritis, attended by a gruel-like exudation, of brick-dust color, which contained pus, fibrin and blood. The tissue of the uterus, to a very minute depth from within outward, was stained of a reddish brown color. But the most important fact was that the liver presented numerous yellowish points, which, on microscopic examination, were found to contain pus, and in the centre of each one of these points was a capillary vessel; this was, in all probability, a secondary deposit, and the endo-metritis was the spark which kindled the fire. Thus I am led to suppose it must be in other cases, where this lesion has been overlooked. Not that there are secondary deposits in each case to testify to the violence of the disease—for these are rare—but there is a true pyæmia. A case of otorrhœa, with infiltration of pus into the jugular vein, and death in five days was adduced. Many of these cases are rapidly fatal, others are not. I do not wish to be understood as excluding from this disease a febrile element, for that it unquestionably has; but, so far as my observation goes, it is accompanied by, if not dependent upon, a local lesion. I saw the erysipelas that prevailed throughout the country ten years ago; it began with a febrile movement. The febrile movement was a part of the disease, and preceded it. There is one point that is worth alluding to, viz: the absorption of the decomposed element in the uterus; this may be so, but I suppose the great cause of death is pyæmia.

Dr. Cock inquired of Prof. Clark if his investigations had been carried any farther than the appearances after death. Has he made any investigations, in the ordinary discharges of the lochia, whether they do not contain pus? Ferguson, many years ago, called these secretions pus, and he believed the veins of the uterus were the sources of the poison. Puerperal fever manifests itself, also, in a minor manner in phlegmasia dolens. I saw, with one of my Bellevue friends, one of these cases; she was then unequivo-

*See BARTLETT on *Fevers*, 4th Ed., pp. 126 and 253.
VOL. XIII., NO. II.—8.

cally in puerperal fever from phlegmasia dolens; it was a few hours before death.

Prof. Clark replied that he had appreciated the importance of the fact referred to in Dr. Cock's first question—had used such opportunities as he had met with to ascertain whether pus was produced in the uterus in other fatal puerperal diseases. In three or four cases of convulsions he had not found it. Second, the contamination from purulent inflammation of the veins is not a case of the class falling under puerperal fever; it is allied to phlebetis in other parts of the body. A married lady who, it was thought, was threatened with convulsions, was bled; red lines followed from the point of venesection; she coughed, and had bloody expectoration, and, if she had lived long enough, would have expectorated pus, from the formation of metastatic abscesses in the lungs. Those cases are therefore excluded.

(To be continued.)

Apoplectic Ophthalmia.—Under this name, Dr. Quadri, of Naples, states a fact worthy of attention. It is, that persons predisposed to apoplexy, present ordinarily a species of ophthalmia, characterized by the presence of varicose vessels, muddiness of the eye, and intolerance of astringent collyria a little strong. In the second form the eye secretes a yellowish mucus, very abundant and viscid, and presents a high degree of photophobia: the cornea may then become the seat of abscess, ulcers, or more frequently of pannus. Sometimes also iritis succeeds to keratitis. The tendency to muddiness, sensibility to astringents, &c., are found in this second form: both forms precede apoplexy one or two years. The importance of these symptoms is equal to the danger of the disease, which must be met in time to be successfully combated.—*Revue Therapeutique* from *Philadelphia Med. & Surg. Jour.*

A Ball among the Insane.—A correspondent dating from Vienna, Feb. 24th, describes a grand ball which took place the Saturday previous in the Imperial Hospice for the Insane, which may assuredly be arranged among the most interesting of the season. Two hundred of the four hundred who are in the Institution, took part in a ball, with the Employees and Medical Staff of the hospital. The members of the Singing Society directed the music. Polkas, quadrilles, waltzes, &c., were danced with the most perfect decorum and grace. The table was abundantly supplied with wines, meats, and confectionery of all kinds. No one would suppose for a moment that the dancers were insane. The greatest gaiety and hilarity existed in this extraordinary ball, which did not break up until three in the morning.—*Gazette d'Augsborg* from *Philadelphia Med. & Surg. Jour.*

EDITORIAL DEPARTMENT.

Quarantine Convention, Philadelphia, May, 1857.—The absolute value of quarantine laws and regulations is among the most important of the questions presented to the sanitarian for his investigation and decision, while pursuing those inquiries which have for their object the prevention of diseases, especially such as assume the character of an epidemic or contagious type.

That a great variety of opinions exists upon the various questions involved in these considerations cannot have escaped notice. The vagaries of epidemics are at times such as to excite suspicion in the most cautious, of the utter inefficiency of any *cordon sanitaire* to limit the spread of disease; while on the other hand the close connections observable between cause and effect are too apparent to escape the observation of the most careless. Public opinion undoubtedly preponderates toward the side of a belief in the value of quarantine regulations in protecting the health of an exposed community. The instinct of preservation, intuitively prompts us to close the doors of entrance against the approaching foe, and though he should scale the housetop, and find some other entrance, the consciousness of having employed such measures of precaution as reason dictates, quiets all self-reproach and reconciles the sufferers to their fate.

There is, however, in the application of these measures of caution, undoubtedly a great want of a proper knowledge of the true principles upon which they should be applied. The arbitrary application of some of the existing laws may undoubtedly work to the injury of a community, financially at least, if not upon the score of health. And suspected persons, may be unjustly punished for the mere suspicion of a contagion lurking in their garments, by an incarceration in quarantine grounds. The value of these measures of precaution furnishes but a poor excuse for their misapplication and the injuries growing out of the same.

It would be a vain boast for science to pretend that it has fathomed all the depths of the mysteries concerned in the development and propagation of contagious and epidemic diseases. We at best, stand upon the very threshold of the subject, and the torch of science illumines as yet but a very short distance the deep darkness in which these subjects are hidden. Some advance has, however, been made, and whatever may be the sum of attainments, humanity calls for its application in its behalf.

An effort has at last been made to reduce to practical application what is known upon the subject, and to establish as far as practicable, a uniformity in the laws governing the entrance to our seaports. A convention of those, who from their official position, or scientific attainments have an interest in this subject, met in Philadelphia, on Wednesday the 13th of May last, and spent three days in the discussion of the numerous questions involved in the subject of quarantine.

This convention resulted in consequence of action recommendatory of such a gathering, being taken by the Board of Health, of Philadelphia, in the fall of 1856. The suggestion itself first was made by Dr. Wilson Jewell, a member of the Board of Health of that city. It resulted in soliciting the representation of the various official health departments in the seaport towns in a convention at Philadelphia. The proceedings of this convention are before us in a neat pamphlet of sixty pages. Although the delegations to the assembly was strictly confined to the seaport towns and cities, and to where quarantine laws are enforced, the subject is one of sufficient interest to claim the attention of the profession generally.

The convention was permanently organized on Wednesday, May the 13th, by the election of Dr. W. Jewell, President. Seventy-three delegates from nine states, and representing twenty-six authorities, were in attendance. Representatives were present from the Boards of Health of Boston, Providence, New York, Newark, Camden, Philadelphia, Wilmington, Baltimore, Norfolk, New Orleans; besides from several medical associations. The delegation was not strictly confined to the medical profession, and the lay members of the several Boards of Health freely participated in the discussions and business of the session.

During the temporary organization of the convention, and previous to the election of permanent officers, Dr. Jewell delivered an address, minutely detailing all the steps taken to bring the present representation together in convention; and also gave an outline of the quarantine regulations of some of the principal cities of the Union: the whole forming an intelligent basis upon which to predicate future action.

A committee of seven was appointed to prepare and arrange business for the convention. The next morning, Thursday, the committee presented a report, which was taken up by the convention for discussion, and each proposition made the subject of especial examination. This labor was completed on Friday, and resulted in the adoption of the following

REPORT.

"Whereas great interest has been awakened in the questions pertaining to commercial intercourse among the nations of the earth, and to the close relations, under some circumstances, of the health of communities to the regulations which affect this intercommunication; and inasmuch as there is great diversity and irregularity in the rigor of enactment which characterizes the legislation of different bodies upon this subject; therefore be it

"Resolved, That it is expedient the system of quarantine regulations be revised, and that correct principles, as far as scientific research and observation have developed them, should be the basis of future enactments, to the end, that a uniform code, as far as practicable, may be secured in all our ports.

"Resolved, That the following propositions be regarded as the sentiment of this convention:

"1. There are certain diseases which may be introduced into a community by foul vessels and cargoes, and diseased crews and passengers.

"2. These diseases are small-pox, and, under certain circumstances, typhus fever, cholera, and yellow fever.

"3. When the latter diseases are introduced in this manner, their action is limited to individuals coming within their immediate influence, and cannot become epidemic, unless there exist in the community the circumstances which are calculated to produce such disease independent of the importation.

"4. The circumstances alluded to, consist in vitiated states of the atmosphere, from local causes, in connection with peculiar meteorological conditions.

"5. Efficient sanitary measures, including quarantine, will, in most cases, prevent the introduction of these diseases, and may, at any rate, disarm them of their virulence, and prevent their extension, when introduced.

"6. The present quarantine regulations, in operation in most of our States, are inefficient, and often prejudicial to the interests of the community.

"7. Diseases may be introduced: 1st, by a foul vessel, especially when proper measures are not taken to keep the hold free from stagnant and putrid bilge-water; and more particularly when there exist in the hold droppings or drainage from putrescible matters, which are allowed to penetrate and remain between the timbers of the ship. 2d. By cargoes, consisting, in whole or in part, of rags, cotton, or like porous substances, shipped from ports at which any malignant epidemic or endemic disease, of a contagious or infectious character, prevailed at the time when the vessel was loaded. 3d. By filthy bedding, baggage and clothing of emigrant passengers, particularly when these are crowded together in insufficient quarters, although the passengers themselves may be free from any actual disease. 4th. By the air that has been confined during a voyage in closely sealed or ill-ventilated holds. 5th. By squalid and diseased passengers landed and crowded together in unhealthy neighborhoods, or in small and ill-ventilated dwellings. 6th. By passengers and crews who are actually laboring under, or infected with any positively contagious disease, and their bedding, clothing and baggage.

"8. To prevent, therefore, the introduction of disease from the several causes enumerated, the necessity is apparent of providing a system by which all parts of a vessel may be ventilated during a voyage; and for the careful inspection of all vessels immediately upon their arrival, and before they are allowed to come up to the wharves of a city, for the landing of their passengers or the discharge of their cargoes. No vessel arriving between the 1st of May and the 1st of November, should, in fact, be admitted to a port until her hold is freely and fully ventilated, nor until the bilge-water is entirely removed.

"9. Provision should be made for the immediate landing of all those portions of the cargo of a vessel, and the baggage and clothing, that may be judged capable of generating or communicating disease; and for their proper purification, at such places and under such regulations as shall preclude all danger of their exerting a morbid influence, either immediately, or upon their subsequent admission into the city.

"10. Provision should be made for the immediate landing from on board of vessels as they arrive, of all persons who are actually laboring under disease, and for their due and comfortable accommodation and treatment, until such time as they can be taken charge of, and properly cared for by their friends.

"11. In the case of a ship load of squalid passengers, or those strongly predisposed to disease, their clothing, beds, and other effects, should be at

once subjected to a thorough ventilation and purification; and, upon their landing, adequate measures should be adopted to prevent them from crowding together in confined, unhealthy, and ill-ventilated dwellings and localities.

"12. When a vessel arrives in a foul condition, or on board of which disease has prevailed during the voyage, after her crew and passengers have been removed from her, she should be subjected to a thorough process of cleansing and purification; for which purpose it may be necessary to discharge her cargo at a safe distance from the city, and to allow only such portions of it to be conveyed there as are incapable of creating disease, the residue being subjected to ventilation in such a manner as shall prevent it from suffering damage and all avoidable deterioration.

"13. The carrying out of these provisions should be intrusted to a single officer, with such assistants as may be required to aid him in the performance of his functions.

"14. This officer should be a regular physician, of unquestionable talents and experience, and possessed of great decision and rectitude of character.

"15. His compensation should be sufficiently ample to enable him to devote his entire attention and energies, throughout the year, to the duties of his office.

"16. While the power of removing him for incompetency, neglect, or other adequate cause, should be vested in some competent tribunal, his appointment should be based solely upon his capacity to fulfil satisfactorily his incumbent duties, and his continuance in office made dependent upon his faithful and skillful discharge of those duties.

"17. To this officer should be intrusted the sole and entire decision, under certain general provisions established by law, as to the treatment required in the case of each vessel that shall arrive, and of its cargo, crew and passengers, and to place it and these in a condition to prevent any danger of the introduction, by them, of disease; he, at the same time, being held to a strict accountability for the manner in which the discretionary power thus confided to him, is executed.

"18. As in every community a Board of Health is necessary to watch over its sanitary condition, and to prevent or remove all domestic sources of disease, this body would appear to be the one in which the power of appointing, and the general supervision of the official conduct of the Quarantine Physician may, with the greatest propriety, be invested.

"19. With a view to procure a uniformity in quarantine regulations throughout the several ports of the United States, the assembling of another,

and probably several, conventions similar to the present one, will be required.

"20. To provide for the assembling of such a Convention in 1858, it is suggested that the President, Vice-presidents, and Secretaries of this Convention, with a committee of one member from each State represented in the Convention, be continued after our adjournment, as commissioners for the purpose of taking the necessary steps for the call of a Convention next year: *Provided, however, that their powers shall cease immediately upon the assembling and organization of the Convention of 1858.*

"21. A thorough examination should be made of all immigrants on their arrival; and if they are not protected against small-pox, they should be vaccinated.

"22. We recommend that there should be attached to our Boards of Health and Quarantine establishments, stations for minute meteorological observations, and vaccine establishments; and that records of these be published at stated periods for the public benefit.

"23. We advise the introduction of increased comforts for crews and passengers, and the ventilation and purification of vessels by a more effectual method."

The vote was taken by delegations, eighteen answered Yea, two answered Nay, and two reported a tie. The delegations from Massachusetts, Rhode Island, New York, New Jersey, Pennsylvania, Delaware, Maryland, voted in the affirmative. Virginia voted in the negative, and the two delegations from New Orleans each reported a tie vote.

It was resolved, that hereafter that the name of this Convention shall be **THE QUARANTINE AND SANITARY CONVENTION.**

It was

"*Resolved*, That each municipal body represented in this Convention be recommended to appoint one or more capable persons to keep a record of the invasion or origin and progress of future epidemics that may from time to time visit them, and return a copy of the same to this Convention.

It was

"*Resolved*—1. That in addition to the usual quarantine establishments, this Convention recommends the introduction of efficient means for removing all persons of limited means from infection, and for preventing the ingress of immigrants and other unseasoned people into ports and cities laboring at the time under pestilential diseases.

"2. That in all cases where rumors and unauthorized reports indicate cer-

tain ports or cities as the seats of epidemic and pestilential diseases of the nature provided against, no such reports shall be the basis for action elsewhere, unless sustained by an official declaration of the Boards of Health, or other properly constituted authorities.

"3. That all such Boards of Health and other public authorities, shall be obligated to declare the existence of invasions of yellow fever and cholera, in their epidemic forms, as they may from time to time make their appearance in the localities under their control.

It was

"Resolved That we recommend the adoption of a complete, accurate and uniform system of registration of births and deaths in all our cities, as a necessary accompaniment of efficient sanitary measures."

Baltimore was recommended as the next place of meeting of the convention, and it adjourned subject to the call of the President. J. M. N.

The Semi-annual Meeting of the Medical Society of the County of Erie, was held in this city, at the Rooms of the Buffalo Medical Association, on Tuesday, the 9th of June last.

The society was called to order by the President, Prof. F. H. HAMILTON, at 11 o'clock, A. M. No subject of very great importance came before the meeting, and the session was much shorter than usual.

Applications for membership were received from Drs. Austin Flint, Jr., Sylvester Rankin, Henry Nichell, C. P. Fanner, and J. B. Cole, and the gentlemen were severally elected upon the terms of their compliance with the by-laws.

Dr. A. W. Nichols, the *Orator* of the day, read a valuable paper, on *Intercostal Neuralgia*, which elicited a vote of thanks, and an order for its publication in the *Buffalo Medical Journal*.

Dr. Newman was appointed *Orator* for the annual meeting, and Dr. Storek his *substitute*.

Dr. Treat gave notice of a proposed amendment to Art. iii, Sec. 1, of the By-laws, altering the time of meetings of the society from the second Tuesday, to the second Wednesday of January and June.

A committee was appointed to make arrangements for a society dinner at the annual meeting.

The balance of the session was occupied in the details of miscellaneous business, but not possessing interest enough for publication.

Medico-Legal Insanity.—Trial of James Getty.—James Getty, indicted for the murder of Daniel Albert, was tried in the Court of Oyer and Terminer of Erie County, on the 24th of May and succeeding days, before Justice Bowen. Mr. District Attorney Humphrey and Hon. Solomon G. Haven appeared for the people; Mr. Albert Sawin, Eli Cook and J. G. Hoyt, Esqra., for the defence.

It was proven by the prosecution that on the 13th of March, at about noon, Daniel Albert was driving along the public road, when Getty approached him with a gun. When about twice the length of the gun distant, Getty shot Albert in the thigh, and cocked the other barrel. Albert jumped off his wagon, seized the gun and tried to get it away or hold the muzzle from him; Getty drew back, thus bringing the gun in range, and fired, the shot took effect in the other thigh, and at the same time blew off his thumb. Getty said "there!" the first words spoken. Albert fell on the snow, Getty brandishing the gun over him. Albert again seized the gun: Getty told him to let go, pulled it from him and walked away. Getty then went into the house, put down the gun, and the murder being mentioned his wife asked him if it was possible he had done such a thing: he replied that he was sorry for it. Some one came and asked him the news; he replied, "The strangest news out here." He had his supper, and was arrested directly afterward.

It was also proven that an old enmity had existed between the prisoner and deceased, and that on many occasions Getty had manifested much bitterness toward Albert.

The defence was insanity. Several witnesses testified to the general good and amiable character of Getty, and that he had never had difficulty with any one except Albert.

Levant Getty, a son of the prisoner, testified that after the death of his sister in August, 1854, his father had been very solemn; in June, 1855, he took a pistol and went out to the barn, came back in half or three-quarters of an hour, looking very strange, and sat up till one in the morning without saying a word; he acted moody after this, and wished to be alone; in 1855 witness saw him talking to himself in the barn, looking excited and pale; in May or June, 1856, he acted strange, and during last summer he would spend much time wandering in the woods or lots; was careless of his business and taciturn; complained of his head. In the fall witness found him sobbing in the barn; he was off for four days once without cause. Once found him watching the house with a gun, at 12 or 1 o'clock in the morn-

ing; the family watched him continually; he could not add up figures; once, without cause, he advertised in the *Patriot and Journal*, to warn people not to trust his family. There had been no trouble to cause this.

Manuel Henshaw testified to irregular conduct and insane appearance of the prisoner.

George W. Gilman says: In the spring of 1856, he was much excited at seeing Albert across the way. He said "By G—d, I am a white man and live in a free country." His wife soothed him, and got him in the house. After that he went to the barn and shut himself in; came back and ate his supper, but did not speak again that evening. Last February Getty came to witness and asked him why he reported that he (Getty) had taken a rope and gone to the barn to hang himself. Witness denied it, but told him that he believed he was an insane man, and would swear to it. A conversation ensued, in which Getty denied recollection of circumstances mentioned by witness. Witness told him that he had advised his family to send him to an insane asylum. Getty became angry, and accused witness of conspiracy with Albert.

The mother of the prisoner testified to a conversation with her son about his suspicions of his wife. She told him his troubles were imaginary, but at his solicitation sounded the neighbors, and learned nothing. His appearance was changed, and he became melancholy. Testified to finding him feeling bad in the barn at the time when he shut himself up; he said he could not live so.

He got up nights sometimes, said he could not sleep, complained of his head. At another time he said he was going out of the country for five years. Several times he wept in talking of his troubles. Getty brought witness into Buffalo to take the cars for Batavia. Unexpectedly to her, he went with her, saying he never should go back to Hamburg; that he had met Albert, had had words from him, and would have shot him if he had had a pistol. He wept on the cars. Last summer there was talk of sending him to the asylum. He is 53 years old.

Other evidence of a similar character was produced. It was proven that he was subject to sudden and causeless bursts of tears; that he guarded the house at night with a gun; that he had causeless suspicions of the fidelity of his wife; was gloomy, suspicious and morose in his manner, that he had several times declared a purpose to leave the country, and on a visit to the west had alarmed his relatives by insane deportment. The evidence of Mr. Perry G. Parker is important. Mr. Parker testified to a series of interviews with Getty last fall as his legal adviser. Getty wished to make a will cut-

ting off his wife's dower; said that there was a conspiracy against him, and that he must leave the country and the world. He wanted to go west, and said he should be killed on the cars. Witness then told him he might go by steamboat; Getty said that would make no difference. He wept and seemed sad and gloomy. In a subsequent interview he complained of a political conspiracy, that a meeting had been held at the *Republic* office, at which most of the city and county officials were present, and letters were read concerning him. He wished witness to discover why some officers were not invited; said a policeman who had been discharged on his account had something to do with it.

These were the facts in evidence on which the medical witnesses were called to base their opinion.

Prof. James P. White testified that he had known the prisoner more or less from a boy; had visited him in jail twice with Dr. Flint. His recollections of early life were correct. When questioned he would answer freely as to his quarrels with Albert and the act of killing him, but the dominant idea in his mind was his present happy frame of mind, on account of a great religious change he had experienced in jail: he constantly reverted to this subject; he admitted that he had no cause which he could tell for suspicion of his wife, but could not resist the conviction. He had never seen Albert about his house, but knew he had been. He took no interest in the murder, left that all with God; did not know whether it was right or not, but he was happy now in his religious feelings. At the request of Dr. Flint he explained that he could not sleep the first night in jail, but spent the night in prayer; and so, too, the second night; when, though the cell was dark, he saw an eye, much larger than a human eye, which he knew to be the eye of God shining in the darkness. He felt as if his feet were put in very hot water, chills ran all over him, and his head was relieved; he became crystalized, and then went to sleep. He said that he was not insane now, and did not admit or deny that he ever had been. He knew that his defence was on the ground of insanity. Dr. White then testified, as an expert to his opinion that Getty was now, and has been for a year past, of unsound mind. He gave a *resumé* of his reasons for that opinion in a very clear and intelligible manner.

(We regret that our report of Dr. White's testimony is so meagre. We are compelled to do even greater injustice to Dr. Flint.)

Prof. Austin Flint sworn. Witness has read a statement furnished him by the counsel for prisoner and subsequently visited Getty in jail. He believes that Getty has been insane for a year past and is now insane.

Dr. Flint summed up the symptoms on which his opinion was founded; the melancholy, change of habits, religious exaltation, fear and suspicion of friends, and his physical appearances. He had carefully examined the symptoms of Getty's case, keeping the thought of simulated insanity in view; he saw no evidence of deception in him.

Cross-examined.—A person insane on any one point cannot be considered as entirely sane on any point. Monomania is a symptom of diseased mind.

The next witness called was Dr. George Cook, the accomplished physician of Brigham Hall, an excellent private insane asylum at Canandaigua. Witness was educated as a physician, was associated with Dr. Brigham at the Utica Asylum, one and a-half years. Is now in charge of a private lunatic asylum at Canandaigua; has given his entire attention to insanity for nine years. Insanity means a chronic nervous disease which changes the natural feeling, thinking or acting, and impairs or destroys the free will of the patient; it renders him incapable of fully directing and controlling his actions, and of correctly appreciating his responsibility to himself, his family, friends, society or the laws; enumerated the special symptoms in Getty's case, bearing on the question of insanity, at considerable length, reciting from the evidence given, from his examination of the patient, and his conduct during the trial; from all this he said: "All these conversations, as well as other facts in the case, are symptoms which to my mind converge to one common centre, which is the existence in prisoner's mind of delusions of fear and suspicion. I have no hesitation in expressing my opinion that the prisoner is insane. I say this without any doubt. If Getty's case had been presented to me months before his arrest, I should have had no hesitation in saying that he was not only insane, but dangerously so at any time after his visit to the west."

Cross-examined.—Mr. Haven examined the witness at considerable length as to the existence of monomania leaving the mind sound on all points except the particular delusion.

Dr. Cook testified to the same purport as Dr. Flint, that a monomania necessarily involved some degree of unsoundness of the reasoning powers; he said that he would not apply the term "uncontrollable impulse" to any condition of Getty's at any one time, but he thought that at several times the delusion of fear upon him was so strong that he acted entirely under the influence of that fear, just as a sane man might act, not uncontrollably but under a strong conviction.

In reply to a question, asked for the satisfaction of public feeling in Hamburg, witness stated that any person visiting a lunatic asylum might meet

patients and converse with them occasionally for months, and never detect a symptom of insanity, and yet the patient be a dangerous lunatic all the time.

In reply to another question, he stated his opinion that some degree of material change in the brain or its membranes, always accompanied insanity, but it might be very slight, a mere difference in shade of color, or even not perceptible.

The case here closed on the part of the defence.

The counsel waived the privilege of summing up the case. The charge of the judge was favorable to the plea of insanity, and the jury returned a verdict of "not guilty by reason of insanity," after an absence of only five minutes.

The history of this melancholy case is another evidence that a dangerous degree of insanity may exist for a long period of time, without being manifest to those not intimately associated with the patient. The neighbors of Mr. Getty were almost unanimous in the belief that his insanity was feigned. They had done business with him in the ordinary avocations of life, without discovering any sign of insanity; and it was only the members of his immediate family, or those to whom he confided his feelings confidentially, that had any suspicion of his mental soundness.

An unfortunate circumstance led the family to conceal Mr. Getty's insanity. It at first took the form of a suspicion of the fidelity of his wife, an estimable woman, and she, unwilling to lift the veil from her family sorrows, would not consent to his removal to an asylum last fall. This seemed at the time the proper course, but it should never have been adopted without the consent of an intelligent physician, and his assurance that his insanity was harmless. This is doubtless a source of poignant regret to the relatives now.

The clear, decided testimony of the medical witnesses is worthy of mention. Their evidence was given in the face of popular opinion, which had become incensed by recent abuses of the plea of insanity. Fortunately for the ends of justice, Mr. Sawin opened the defence by placing it distinctly on the ground that no irritability or violence of temper, no eccentricity, and no brooding over injury should be interpreted as insanity. Neither did they believe in, or claim the presence of a moral insanity, driving the prisoner to the commission of crime.

On the return of the jury the prisoner received the verdict with that entire absence of interest or emotion which had marked his conduct throughout. A writ of *de lunatico inquirendo* was moved, but subsequently set aside, and the prisoner was ordered to be taken to the State Asylum at Utica, for medical treatment.

Constitution of the Medical Society of South Western New York.—

Under this name, a portion—we wish it were larger—of the physicians of Chautauque county, have organized a society, which has now for a year had active existence, designed to afford opportunities for professional improvement, and to advance the interests of physicians generally. It has within its ranks some energetic and earnest men, capable of giving interest and character to its proceedings. The effect of such societies is always to promote harmony and professional *esprit du corps*, and we trust that this one has a prosperous career before it. We notice that the members have established a fee-bill. For ourselves we are inclined to regard its prices as too low, but the great object of a fee-bill is to have some standard of minimum charge, and this will accomplish that end. The society meets four times yearly, at Jamestown and Westfield alternately. We hear that the meetings are well attended and profitable.

*Our July Number.—*At last we have nearly caught up with the times and bring out our number for July with some regard for the first of the month. The delay in the issue of recent numbers has been owing to a cause for which ourselves and our misfortunes are alone responsible. Our publishers are ever prompt, and the entire routine of the typographical execution of the Journal is in a most satisfactory condition of order and system. But we of the chair editorial, after dragging through a winter of constant labor and exertion, with more duties than time, found ourselves at its close merged in the sorrow of a domestic affliction, and sought in a brief respite from toil a necessary relief. Once behind hand it is no easy matter to bring up again, and so we have gone on in a dilatory manner. We hope now to keep and improve upon the ground we have gained.

*Buffalo General Hospital.—*It is with much pleasure that we announce that the workmen are already engaged upon one wing of this new hospital. It is intended to open it for patients during the coming fall or winter. This new institution will add largely to the already excellent clinical advantages of Buffalo. The edifice is situated on High street, about a quarter of a mile from the college. It is intended to be a model building for its purposes.

Dr. James McClintock.—One of the most painful events which we have ever been called upon to record, has recently occurred in Philadelphia. Dr. James McClintock, formerly a well-known teacher, a few years since sold his name to Thomas McElrath, of the New York Tribune, and Burton, of Burton's Theatre, to be used *ad captandum vulgus* in the sale of a long list of nostrums, of which McClintock furnished the recipes and got \$5000 therefor. The speculation failed. The philanthropist of the Tribune and the low comedian of the theatre, sunk \$70,000 in the operation, and acquired a valuable experience in quackery. McClintock was left upon his oars, and finding himself poor, with a damaged reputation, he plays the "repentant sinner," and gets the appointment of Resident Physician-in-Chief, at Blockley Hospital, Philadelphia, a post of honor and profit. To keep up the cant of returning to the fold and making atonement for his errors, he publishes the recipes of his quack remedies in that very appropriate receptacle, the Philadelphia Medical Journal. He sold these recipes once for \$5000, and it would seem to the ordinarily honest man that this latter proceeding betrays Messrs. McElrath and Burton, as badly as the sale itself betrayed McClintock's honor.

The Assistant Physicians at Blockley, have all resigned—to their honor be it spoken. They have taken a manly course in view of this insult to the profession, this offer of a reward to scapegraces.

Surgical Reports.—With our present number we commence a series of clinical reports of cases treated under the care of Professor Hamilton, at the Hospital of the Sisters of Charity, by Dr. B. H. Lemon, clinical assistant. These reports are intended as companions to the medical cases reported by Dr. A. W. Nichols. The two series together will constitute a valuable practical repertory. They are made up from cases presented to the class of the University of Buffalo during the last session, and will afford some index to the clinical advantages of that school.

Resignation.—Prof. S. G. Armor has resigned his chair of Pathology and Clinical Medicine in the Medical College of Ohio. We have heard no name mentioned as likely to succeed him.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

AUGUST, 1857.

NO. 3.

ORIGINAL COMMUNICATIONS.

ART. I.—FRACTURE OF THE OS HYOIDES. (*Syn. Fracture of the Tongue-bone. Fractura ossis hyoides.*) By FRANK H. HAMILTON, M. D.

M. Orfila has reported the case of a man, aged 62 years, who had been hanged, and whose os hyoides was broken through its body on its right side.* M. Cazauvièilh has also seen a fracture of this bone in two persons who had been hanged: in one of which the fracture was probably in the body of the bone, and in the other through one of its cornua.†

Lalesque published in the "Journal Hebdomadaire," for March, 1833, a case which occurred in a marine, 67 years old, "who, in a quarrel had his throat violently clenched by the hand of a vigorous adversary. At the moment there was very acute pain, and the sensation of a solid body breaking. The pain was aggravated by every effort to speak, to swallow, or to move the tongue, and when this organ was pushed backward. Deglutition was impossible, the patient could not articulate distinctly; and he was unable to

* *Traité de Méd. legale*, 3d ed. tom. 2, p. 423. Also *Traité des Frac. et des Lux.*, par L. F. Malgaigne, vol. i, p. 405.

† Cazauvièilh, *du Suicide*, etc., p. 221. Also *Malg. op. cit.*, p. 405.

open his mouth without exciting a great deal of pain. He placed his hand upon the anterior and superior part of his neck to point out the seat of the injury. This part was slightly swollen, and presented on each side small ecchymosis, one above, more decided, immediately under the left angle of the lower jaw. The large cornua of the os hyoides was very distinctly to the right side, and it could be felt on the left deeply seated by pressing with the fingers; in following it in front toward the body of the bone, a very sensible inequality near the point of junction of these two parts could be perceived. By putting the finger within the mouth, the same projections and cavities inverted could be felt, and even the points of the bone which had pierced the mucous membrane, &c., were evident. Having bled the patient, and placed a plug between his teeth to keep the mouth open, the broken branch was brought by the finger back to the surface of the body of the bone, and easily reduced. The position of the head inclined a little back; rest, absolute silence, diet and some saturnine fomentations, composed the after-treatment. To avoid a new dislocation, by the efforts of swallowing, the œsophagus tube of Desault was introduced, to conduct the drinks and liquid aliments into the stomach; this sound was allowed to remain until the twenty-fifth day, at this time the patient could swallow without pain, and began to take a little more solid nourishment, and at the end of two months the cure was complete. By placing a finger within his mouth, a slight nodosity could be felt in the place where in the recent fracture the splintered points were perceptible.*

Dieffenbach has also recorded a fracture of the great, right horn, produced in the same manner, by grasping the throat between the thumb and fingers, which occurred in a young girl only 19 years old. Very slight pressure upon the side of the bone was sufficient to move the fragment inward, and to produce a crepitus, but it immediately resumed its place when the pressure was removed. There being, therefore, no displacement, the cure was effected in a short time without resort to any remedies except tisans and antiphlogistics. She was not even forbidden to speak.†

Auberge saw a similar case, in a person 55 years old, occasioned by grasping the throat. The fracture was in the great horn of the right side, and the displacement was so complete that crepitus could not be felt, and the mucous membrane of the pharynx was penetrated by the broken bone.‡

* Amer. Jour. Med Sci., vol. xiii, p. 250.

† Medic. Vereinszeitung für Preussen, 1833, No. 3. Gazette Med., 1834, p. 187. Also Malg. op. cit., p. 405.

‡ Revue Méd., July, 1835. Also Malg. op. cit., p. 405.

The following example is reported by Dr. Wood, of Cincinnati, Ohio, as having come under his observation in the year 1855:

"Through the kindness of our friend Dr. P. G. Fore, of this city, we were invited to examine a case of fracture of the os hyoides, that had occurred about one week before we saw it, in one of his patients. The patient was a female, about thirty years of age, who had fallen down the cellar steps, striking the prominent part of the larynx and hyoid bone against a projecting brick, severely injuring the larynx as well as fracturing the bone.

"The fracture was on the left side, and near the junction of the great horn with the body of the bone. Crepitation was distinctly felt on pressing the bone between the thumb and finger; or when the patient would swallow; though, at this time, the severe symptoms that followed the accident, and continued for several days, had somewhat subsided.

"Immediately after the accident, there was profuse bleeding from the fauces, and she experienced great difficulty and pain in the act of swallowing, and the power of speech was almost entirely lost. On attempting to depress or protrude the tongue, she felt distressing symptoms of suffocation. Considerable inflammation and swelling of the throat and larynx ensued, and continued in some degree up to the time of our visit.

"To-day (about four weeks since the accident) Dr. F. informs us that the patient has so far recovered as to be able to converse, though the voice is somewhat impaired. She is yet unable to swallow solid food, and is wholly sustained by fluids."*

Marcinkovsky saw a woman in whom both the lower jaw and the left horn of the os hyoides were broken by a fall from her carriage against a wall. She died in about twenty-four hours with suffocation.†

Dr. Gründer reports the following:

"A laborer, æt. 63, fell from a wagon on his face, and discharged a large quantity of blood by the mouth. He found he could not swallow, and when seen twelve hours afterward, complained of severe pain in the neck and nape, with inability to turn his head, though no injury of the vertebræ could be detected. His voice was hoarse and difficult. On attempting to drink, the fluid was rejected with violent coughing, the patient declaring he felt it as if entering the air passages. An examination of the fauces led to no explanation of this condition. The epiglottis did not, however, appear to completely

* *Western Lancet*. Also *N. Y. Jour. Med.*, vol. xv, p. 152.

† *Medic. Vereinszeitung, für Preussen*, 1833, No. 15. *Gazette Médicale*, 1833, p. 354. Also *Malg. op. cit.*, p. 405.

close the larynx, or to be in its exact position. The tongue was movable in all directions, and pressing it down with a spatula caused no inconvenience. The hyoid seemed to possess its continuity. No crepitation or abnormal movability could be perceived, and no pain at the root of the tongue occurred on attempting to swallow. After repeated examinations, the case was concluded to be one in which the functions of the nervus vagus had undergone great disturbance, or the muscles of the larynx had become torn or paralyzed. Medicine and food were administered by means of an elastic tube. The patient had a good appetite and slept well; the pain of the neck was lost, and its motion recovered; a hectic cough, from which he had long suffered, alone remaining. After continuing, however, to go on thus well for six days, the cough increased; the appetite failed; strength was lost; the voice was scarcely audible; and in five more days the patient died exhausted. At the autopsy a fracture of the os hyoides was found. One of the large cornua was broken, and had become firmly imbedded between the epiglottis and rima glottidis, inducing the raised position of the epiglottis, loss of voice and difficulty in swallowing. The fracture was probably produced by muscular action, a cause first assigned in a case occurring to Ollivier d'Angers."* I think it more probable, however, that this fracture was the result of a direct blow, than of muscular action.

In the case referred to, however, as having been reported by Ollivier, there can be no doubt that the fracture was due to muscular action alone.

A woman, fifty-six years old, made a misstep and fell backward, and at the same moment that her head was thrown violently back, she felt distinctly a sensation as if a solid body had broken in the upper part of her neck, and upon her left side. An examination showed that she had fractured the great, left horn of the os hyoides. Inflammation and suppuration followed, and finally, after about three months, the posterior fragment made its way out in a condition of necrosis, and the fistula promptly healed, but there remained for many years a sense of uneasiness about these parts when she swallowed, sometimes amounting to pain.†

Etiology. Of the ten cases which I have found upon record, three were produced by hanging; three by grasping the throat between the thumb and fingers; three by direct blows, or by falls upon the front of the neck; and one by muscular action alone.

* Schmidt's Jahrbuch., vol. 68. Also Amer. Jour. Med. Sci., vol. 49, p. 253, Jan., 1852.

† Malg. op. cit., p. 405.

The observation of Mr. South that fracture of the bone "is almost invariably found"* in persons executed by hanging, is probably incorrect, since although a large proportion of these subjects are submitted to dissection both in this and in other countries, yet I know of but these three examples which have been published.

Pathology, Symptomatology and Diagnosis. The body of the bone seems to have been broken in all of those cases which resulted from hanging; while in all of the other examples the fracture has occurred in one of the great horns, or at the junction of the horns with the body. Generally the displacement inward of one of the fragments has been so complete as that crepitus could not be detected. It was present, however, in the examples mentioned by Dieffenbach and Wood. In two instances the mucous membrane has been penetrated, and in one the fragment was projected between the epiglottis and rima glottidis.

The accident has been characterized by a sudden sensation as if a bone had broken; in a few instances, by profuse bleeding from the fauces; by difficulty in opening the mouth; by impossibility of deglutition, and by loss of voice in others; with great pain in moving the tongue, the pain being especially at its root; in one instance the tongue was perceptibly drawn to one side. There is also usually more or less swelling and soreness about the neck, with ecchymosis; and at a later period, cough, expectoration, hoarseness, &c. The circumstances which, however, indicate certainly the nature of the accident, are preternatural mobility of the fragments, with or without crepitus, and the angular, inward projection, which may in most cases be distinctly felt in a careful examination of the pharynx.

In the case related by Grüner, the only symptoms were a loss of voice, difficulty of deglutition, and a sensation when the attempt was made, as if the fluids passed into his windpipe; with also an imperfect closure of the epiglottis upon the rima glottidis. No preternatural mobility or irregularity in the fragments could be detected, nor was there crepitus, and it was concluded that the bone was not broken, yet the autopsy showed that the fragment was imbedded deeply between the epiglottis and the rima glottidis.

Prognosis. It is only in view of its complications that this accident can be regarded as serious: where the severity of the injury has been such as to fracture the lower jaw at the same time, as in the case related by Marcini-

* Note to *Chelina's Surgery*, Amer. Ed., vol. i, p. 581.

kovsky, or such as to bury the fragment deep in the tissues about the rima glottidis as in the case mentioned by Grüner, a favorable termination could scarcely have been expected; and these are the only cases yet published in which the death was in any way connected with the fracture. One-half of the whole number have died, but of these, three died by hanging, and the remaining two from the causes named. Of the three in whom the accident resulted from a direct blow, only the patient of Dr. Fore, of Cincinnati, has survived; while of the three whose fractures resulted from lateral pressure upon the cornua, all recovered; so also, did the patient in whom the fracture was produced by muscular action.

Treatment. No doubt when the fragments are displaced an attempt ought to be made to replace them by introducing one finger into the mouth, whilst with the opposite hand the fragments are supported from without. Lalesque found this a matter of some difficulty, but Auberge experienced no difficulty at all. I suspect, however, that the amount of difficulty will very much depend upon the degree of displacement, and the consequent laceration of the soft tissues about the bone. But however this may be, it must be altogether another thing to be able to keep in exact apposition the broken ends of a bone whose diameter is so inconsiderable, and upon which it is quite impossible to apply any apparatus or dressings to retain the fragments in place. Lalesque threw the head of his patient slightly back, with the view of making "permanent extension" upon the fragments through the action of the muscles and ligaments attached to the bone, and he recommends this position as that which is best calculated to preserve the coaptation. Malgaigne, on the contrary, without having himself seen any example of this fracture, believes that the position of flexion of the neck, with entire relaxation of the muscles would be most suitable.

In all cases it will be proper to enjoin silence, and to adopt suitable measures to combat inflammation: such as general or topical bleeding, fomentations, moistening the mouth with cool water, or permitting small pieces of ice to rest in the mouth until dissolved, without allowing the fluid to be swallowed. In other examples, no doubt the patient may be permitted to swallow.

FRACTURE OF THE CARTILAGES OF THE LARYNX. (Syn. *Fractura Laryngis.*)

Thyroid Cartilage. The examples of fracture of the larynx which may

be found upon record, are also very few. M. Ladoz examined the larynx of a man who had been assassinated, and upon whose neck he found a handkerchief bound so tightly as to leave, after its removal, a deep furrow; but the neck showed also distinct marks produced by the fingers and thumb. There was a fracture of the thyroid cartilage which extended obliquely downward and outward through its right wing. The whole of the larynx was very much ossified, although the subject was only thirty-seven years old.*

In 1823, M. Ollivier communicated to the Academy of Medicine a case in which, this cartilage being broken, the patient died of suffocation.†

M. Marjolin says, "two women at the hospital being engaged in a quarrel, one of them seized her antagonist by the throat, and gripped her so strong that she broke the thyroid cartilage from its upper to its lower margin. You will imagine that it was not very difficult to determine the existence of a fracture, and that no retentive apparatus was demanded. Silence, regimen, a small bleeding, and the cure was accomplished."‡

These are the only cases of fracture of the cartilages of the larynx of which we have any precise account, in which the thyroid cartilage was alone involved.

Thyroid and Cricoid Cartilages. Plenck saw a fracture of both the thyroid and cricoid cartilages produced by falling upon the rim of a pail.‖ Morgagni also says that he had seen fractures of the larynx; and Remer mentions a fracture of the larynx found in a person who had been hanged;§ but in neither case is it said in which cartilage the fracture occurred, or whether it had not occurred in both.

I am able, however, to furnish from my own observation another example of fracture of both cartilages:

John Calkins, of Collins, Erie Co, N. Y., æt. 41, is supposed to have been kicked by a young horse on the 10th of Nov., 1856. He was alone in the stables when the accident occurred, and being stunned by the blow, he was unable himself to give any account of the manner in which the injury was received. When found, he was sitting upright, but unable to articulate, except in a whisper. Drs. Barber and Davis, of Colden, saw him about two

* Gazette Médicale, 1838, p. 698. Also *Traité des Fractures et des Luxations*, par L. F. Malgaigne, vol. i, p. 409.

† Archives Générales de Médecine, tome ii, p. 307. Also Malg., op. cit., p. 409.

‡ Marjolin, Cours de Patholog. Chir., p. 396. Also Malg., op. cit., p. 409.

‖ Malg., op. cit., p. 403.

§ Morgagni, de Sedibus, etc., Epist. 19, num. 13, 14 et 16; Remer, Annales d'hygiène, tome 4, p. 171. Also Malg., op. cit., p. 408.

hours after. His countenance was anxious; his pulse feeble; extremities cold; and he was breathing with great difficulty. A small quantity of blood was issuing from his fauces. His upper lip was cut and a few of his teeth dislocated: the wound appearing as if inflicted by one of the corks of the horse's shoes. There was no other wound; but over the left wing of the thyroid cartilage there was a slight discoloration, pressure upon which produced intense pain and suffocation, and disclosed the fact that the thyroid prominence was depressed very much and broken. Cold lotions were directed to be applied, and as the thirst was excessive, but deglutition impossible, he was permitted to hold pieces of ice in his mouth. This plan, with but slight modifications, such as the substitution of warm fomentations to the neck for the cold lotions, was continued until the following evening, when, at the request of the attending physician, Dr. Barber, I was called to see him. The symptoms remained nearly the same as at first. He was unable to speak audibly, or perform the act of deglutition; his breathing was difficult and at times threatened suffocation. The lateness of the hour, with other circumstances, determined me to defer surgical interference until morning. At day break of the 12th I made the operation of laryngotomy, and introduced a large double canula into the crico-thyroidean space. This operation was rendered difficult by the great amount of swelling about the neck, due both to emphysema, and bloody with serous infiltrations. The breathing immediately became easy, and gradually the appearance of asphyxia disappeared from his face; but after about six or seven hours, he began perceptibly to fail in strength, and died at 3 o'clock, P. M., of the following day, apparently from exhaustion rather than from suffocation: having survived the accident about seventy-two hours, and the operation about thirty-four hours.

The autopsy disclosed a comminuted fracture of the thyroid cartilage, with a simple fracture of the cricoid. The thyroid was broken almost perpendicularly through its centre; the line of fracture being irregular, and inclining slightly to the left side. The left inferior horn was broken off about three lines from its articulation with the cricoid cartilage. The right ala was broken also in a line nearly vertical, but irregular, at a point about six lines from its posterior margin. The pomum adami was depressed to the level of the cricoid cartilage, and the left ala, being completely detached, was thrown inward and upward several lines. Underneath the perichondrium, especially upon the inner side, there was pretty extensive bloody infiltration. Ossification of the cartillages had commenced at several points, but it had made but little progress. The central fracture of the thyroid was through cartil

lage alone. The fracture of the right ala was through cartilage until it reached a bony belt comprising the two inferior lines of its course. The left lower horn was ossified, and the fracture was through this bony structure. The fracture through the cricoid cartilage commenced close upon the margin of a bony plate, but in its whole course it traversed only cartilage. It was on the left side. There was also an incomplete fracture on the right ala of the thyroid cartilage, commencing in the line of the principle fracture and extending obliquely downward about three lines, until it was arrested by the bony plate which constituted the lower margin of this wing.

A ragged, lacerated wound in the back of the larynx, above the cricoid cartilages, communicated directly with the œsophagus.

Cricoid Cartilage. Both Valsalva and Cazauvielh have each met with a single example of this fracture, without fracture of the thyroid; and Weiss has found the cricoid cartilage broken into numerous fragments, and at the same time separated from the trachea.*

Etiology. As a predisposing cause, advanced age, with its usual concomitant, partial or complete ossification of the cartilages, has been thought to occupy a prominent place. The number of recorded cases is, however, too small to establish its actual value. In the case reported by Plenck, the cartilages were already very much ossified, although the subject was only 37 years old. Morgagni observed that in his experience it had occurred always in advanced life. In my own case, however, the cartilages were only slightly ossified, the patient being 41 years old; nor did the lines of the several fractures indicate a preference for the bony plates; but it seems to me that they rather avoided them, and in the case of the incomplete fracture, the bone appeared to have arrested the fracture. In fact, a few experiments have satisfied me that the adult laryngeal cartilages are quite as brittle as bone, and, consequently, that ossification in no way increases their liability to fracture.

The immediate causes have been direct blows, as from falling upon the edge of a pail, a kick from a horse; or pressure, as in hanging, or by grasping the larynx strongly between the thumb and fingers.

Symptomatology and Diagnosis. The signs of this accident are such as usually attend any severe injury of this organ, whether accompanied with a

* Malg., op. cit., p. 408.

fracture or not: such as pain, swelling, difficult deglutition, embarrassed respiration, a loss of voice, with cough, and perhaps bloody expectoration, with emphysema, &c.

But none of these can be regarded as diagnostic; although, when taken in connection with the history of the accident, especially if a very severe and direct blow has been received, or more certainly still, when symptoms so grave and complicated have followed an attempt at strangulation by grasping the throat, they may be regarded as probable or presumptive evidences.

A positive diagnosis must depend upon the presence of a sensible displacement, or motion of the fragments, with crepitus.

In the case related by Plenck, death followed almost immediately, with convulsions, and without any outcry: indicating, probably, some severe lesion of the spinal marrow; while in M. Ollivier's patient suffocation ensued, at first intermittent, and finally permanent.

In my own case, suffocation was throughout a prominent symptom, with only such slight intervals of amelioration as might have been occasioned by the extrication of the blood or mucus from the larynx.

Prognosis. The prognosis ought to depend rather upon the complications and upon the gravity of the symptoms, than upon the simple decision of the question of fracture. A fracture produced by grasping the wings of the thyroid cartilage, and without any great contusion or laceration of the soft parts, might reasonably be expected to terminate favorably under judicious management; but when, on the contrary, the fracture is the result of great violence inflicted directly upon the front of the cartilages, producing severe contusion and laceration, and followed by great swelling, very difficult respiration, complete aphonia, impossibility of deglutition, &c., the prognosis cannot but be unfavorable—and indeed the woman spoken of by Marjolin, whose larynx was broken by grasping the neck, is the only one, so far as we know, whose recovery has been mentioned.

Treatment. In examples of simple, uncomplicated fracture, "silence, regimen and a small bleeding," may suffice; but in other cases, it may become necessary to introduce a tube into the stomach to supply the patient with food and drinks, since deglutition may be impossible. If also, suffocation is imminent, there may remain no alternative but a resort to tracheotomy, or to laryngotomy. I am not aware that this has ever been practised except by myself, yet its propriety, under certain conditions, is sufficiently manifest.

As to a "reduction" of the fragments, by manipulation, I believe it will be found generally, if not always, impracticable. Whatever displacement exists must be mostly inward, and we can have no means of forcing them again outward. Nor if once replaced, do I see any reason to suppose that they would not become immediately displaced.

Chelins has suggested the propriety in such cases, of cutting open the coverings of the larynx freely in the mesian line, and after stanching the bleeding, proceeding at once to divide the larynx itself in its whole length, and then replacing the broken cartilages.* The procedure has an aspect of severity, but I can well conceive of circumstances which would justify its adoption; not, however, so much for the purpose of replacing the cartilages, as for the purpose of arresting a fatal internal hæmorrhage, and of giving a free admission of air to the lungs. If this operation were to be practised, the wound ought to be left open for a sufficient length of time to allow of the subsidence of the inflammation, and then permitted to close with such precautions as experience teaches are usually necessary after the windpipe has been opened.

Active antiphlogistic measures, combined with fomentations to the neck, so far as these latter are found to be agreeable and practicable, are important measures, and not to be overlooked in the general plan of treatment.

My own patient, also, found small pieces of ice, permitted slowly to dissolve in the mouth, very grateful, but he preferred very much as an external application, the warm fomentations to the cold lotions.

ART. II. — *Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity*, AUSTIN FLINT, M. D., *Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857.* Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.

No. V. *Ecstasy.*

There are two very rare forms of disease involving more or less disturbance of the nervous system, which are presented to our notice in a manner so remarkable, that the diagnosis of them is comparatively easy, although we may never have witnessed previously an instance of either disease. The distinction between *cataplexy* and *ecstasy*, has not always been drawn by

* System of Surgery, Philadelphia Ed., vol. i, p. 581. 1847.

writers; yet these diseases differ in important points. Catalepsy and ecstasy occur so rarely, that only thirty-eight cases had been collected by M. Bourdin, in a treatise on this subject, which was published in 1841. It is not stated how many of these cases were instances of ecstasy; but the latter affection appears to be as infrequent as catalepsy, if not more so.

Catalepsy derives its name from the peculiar manner in which the patient is attacked, and has been defined to be "a sudden suspension of the action of the senses and of volition; the limbs and trunk preserving the different positions given to them." The disease is paroxysmal, unaccompanied with febrile movement, and usually attended with *complete suspension of the intellectual faculties*. The voluntary muscles retain that condition of contractility in which they were at the moment of the attack; and they appear to possess a tetanic rigidity. But, when the extremities or trunk are handled, they will be found to be *quite elastic*; and we are able, with scarcely any force, to place them in any position we please; and such position will be retained for a greater or less length of time, notwithstanding the posture which we cause the patient to take, might be extremely inconvenient, and even impossible for him to assume in health. Thus, the patient may be placed so as to rest only on the sacrum, both lower extremities being extended and elevated, and the trunk likewise raised; and this posture, which it is impossible to assume in health, will be maintained for a short time. However, the patient soon manifests a disposition to take a less uncomfortable posture, by slight motion of the extremities and trunk which slowly resume the horizontal position.

Sensibility is almost always null or at least obtuse, during an attack of catalepsy. In regard to those symptoms not immediately referable to the disorder of the nervous system, the skin may be cold, and the joints stiff; the respiration and the circulation scarcely appreciable; such symptoms denote a severe paroxysm; but, in milder attacks, there may be but little variation in the temperature of the surface, or in the elasticity of the articulations; and the respiratory movements and the pulse may be less frequent than in health. The attack may continue for some days, but usually it lasts but a few hours. In a few cases the patients will eat and drink when food and liquids are introduced into the mouth, and digestion will be performed as in health.

Catalepsy is not, of itself, a grave affection, but may become so by complication with other diseases. It would appear to be more frequent among females than males.

There may occur instances in which *the loss of consciousness is incomplete*; these cases are extremely rare. Catalepsy may, therefore, be divided into *complete, incomplete and complicated*. Those peculiar conditions called *trance* and *daymare*, are instances of incomplete catalepsy. In these cases, the intellectual faculties are not entirely suspended; and the senses are not materially affected; the patient being unable to move or to speak, but conscious of all that is transpiring around him. Such cases, at least, resemble more closely the cataleptic condition than they do that of ecstasy. In some of these instances, the patients present all the appearances of a corpse; and hence are termed cases of *apparent death*.

We desire to direct attention more particularly at this time, to that other condition of the nervous system which very appropriately has been called *ecstasy*, on account of an interesting case of this disease which occurred lately at the hospital.

Ecstasy has been defined to be, "that condition in which an individual delivered over entirely to a dominant thought, remains immovable, and a stranger to all that surrounds him." There are present suspension of voluntary movements, and of the action of the senses: this may be complete or incomplete. The patient is absorbed in some idea of the imagination; and his expression depicts the thoughts which so completely engage his mind. At times, this expression is that of ineffable happiness; but always, it is that of *intense abstraction*. Often, there are hallucinations of the senses; and, then, we have that condition which has been called "*vision*." Dr. Copland states, that many of the Italian Improvisatori are in possession of their peculiar faculty only when experiencing an ecstatic paroxysm. It is not unusual for patients affected with this disease, to sing and to talk. The disease is paroxysmal, and is a purely nervous affection. When the attack comes on, the patient becomes insensible, unmovable, and very rarely the limbs retain, as in catalepsy, the position which they had at the commencement of the paroxysm. His countenance is pallid, and his mouth is partly open; the eyelids are expanded and the eyes are fixed in one direction, usually turned upward. So far is sensibility suspended, that foreign bodies may be applied to the cornea without the patient making any effort to prevent their lodging upon the eye, or to remove them. The pulse and the respiratory movements may be normal, or less frequent than in health; but not notably so. The bowels are usually constipated; and the urine may not be voided, rendering repeated examinations of the bladder necessary. Sometimes when food and drinks are introduced into the mouth, the individual will eat and drink; on the other hand, the food or the liquid having been placed in the

mouth, the patient will allow it to fall or run out, without manifesting any disposition to retain them.

After continuing for a variable period, from a few hours to as many days, the paroxysm terminates, leaving the patient very much dejected, and complaining of fatigue. The attack may recur at periods more or less remote from each other. All writers agree in stating, that ecstasy is an *extremely rare* affection; it is noticed most frequently in persons who meditate long and profoundly on subjects connected with religion; and in those who dwell on the objects of disappointed affection. Grisolle, to whom we are indebted for much of our information on these subjects, states, that ecstasy sometimes prevails as an epidemic; this appeared to be the case in central Sweden, in the years 1841 and 1842.

It will be remembered that the condition of *trance* was included under the head of *cataplexy*, and that of *vision* under the head of *ecstasy*. The distinction between *cataplexy* and *ecstasy* is as follows. In *cataplexy*, there is a *sudden suspension, complete or incomplete, of the intellectual faculties*, of sensibility, of voluntary motion, and of the actions of the senses; the trunk and limbs retaining the position which they had at the time of the attack, and capable of maintaining any position in which we choose to place them, however inconvenient or impossible such a position would be in the interval of the disease: *the paroxysm terminating suddenly*, or the individual recovering in a very short time. *Ecstasy*, although paroxysmal, is *not so sudden in its access; the individual concentrating his intellectual powers upon some imaginary object, is withdrawn more or less rapidly from the influence of external impressions*; the sensibility becomes more and more obtuse, and finally, suspended; the power of voluntary motion is lost; and the expression of the patient shows the profound and the abstracted character of the objects upon which all his intellectual faculties are concentrated; in a variable period of time, the mind breaks loose from the dominant thought; sensibility returns; external impressions are regarded; the voluntary muscles act in obedience to the dictates of the will; and the patient *slowly returns* to a condition of comparative health.

In reference to the *treatment* of ecstasy, but little need be said. That plan of treatment which has been recommended most highly and which has proved most successful, consists chiefly in measures which produce a powerful effect on the mind, rousing the patient to the influence of external impressions, and forcibly drawing away the intellect from the contemplation of the idea which has so long and so firmly held it. A jet of *cold water*, even ice-water, projected upon the face with considerable force, has at times been

employed with success. In the following case, the *moral effect* produced by the application of a *heated iron*, proved highly beneficial. If the attack continue for a length of time, it will be necessary, in addition to mental remedies, to administer forcibly the aliment and drink; and to compel the patient to swallow them: the function of digestion being unimpaired in this disease.

CASE.* Aug. 3d. Jacob Humble, German, aged 25 years, mechanic. Admitted on the evening of the 1st instant, in a state of unconsciousness. Previous history not ascertained. He was in the hospital during last winter, in a similar condition, which continued for several days.

Yesterday morning I found him apparently in quiet sleep. On raising the lids of eyes, the pupils contracted freely. He was not roused to any manifestation of consciousness. On raising the eyelids, they remained open for some time, and he apparently took no notice. Flies creeping on the face and even on the conjunctiva, did not disturb him. His respiration was perfectly normal; pulse 76, and regular; skin normal; no distension or tenderness of abdomen. Drinks and nutriment taken into the mouth, are retained there for some time, and mostly escape, a small portion being swallowed. He lies motionless; does not change his position, and gives no manifestation of suffering.

The cold douche was applied to the head for some time, but with no effect.

An examination of the precordia revealed no physical sign of heart affection.

An enema of spirits of turpentine and tincture of assafoetida, was alone prescribed.

This morning I find him in the same situation; he has remained so since yesterday. The symptoms are the same as on yesterday. Respiration 16; pulse 76; skin warm and mellow. His countenance and aspect are such as denote perfectly quiet sleep. Deglutition is not impaired; he swallows at certain intervals, and does not manifest difficulty in the act when fluids are introduced into the mouth; but he does not call the act into exercise by any voluntary effort. Applying a bottle of ammonia to the nostrils, occasions contraction of the orbicular muscle of the mouth and flushing of the face, but no manifestation of consciousness nor efforts to escape from the inhalation. No remedy is prescribed to-day; but efforts are to be made to give milk from time to time.

* Transcribed from record of case by Prof. Flint. n.

Aug. 4th. No material alteration. He has remained apparently unconscious, and nearly motionless, since last record. He lies now with his eyes opened part of the time, but takes no notice; his eyes are fixed in one direction; winks but seldom. A little erythema and swelling of the right side of the nose. There is no evidence of paralysis. Drinks and nourishment introduced into the mouth, for the most part appear to be ejected. There has been no evacuation of the bowels nor bladder since his admission: the bladder seems to be moderately distended. The catheter was introduced without resistance on his part, or difficulty, and about a quart of water removed; after removing the catheter, a little urine was expelled, together with air. The abdomen is greatly collapsed. On attempting to introduce a little brandy and water into the mouth, he closes the teeth firmly. The pupils are mobile. The fingers may be brought quite in contact with the conjunctiva before he winks; but he occasionally winks when the finger is at some distance from the eye.

After recording the above, whilst engaged in examining other cases, it appeared as if he watched our movements, when he supposed he was unobserved. He turned over on the left side, in bed, which he has not been observed to do before.

No treatment; brandy and nutriment to be administered if practicable.

Aug. 5th. Marked improvement. He lies with his eyes open, and his countenance denotes more intelligence. He does not speak nor appear to heed questions. Makes slight and ineffectual efforts to protrude the tongue when requested. He takes his nourishment freely, and apparently with relish. No evacuation from his bowels or bladder since yesterday. Pulse not accelerated, and skin cool. Last night he asked repeatedly for drink, after some tea had been forcibly administered. He said that he did not hear anything. He wept, last night, violently.

Aug. 6th. Aspect and symptoms not so good as on yesterday. Resists introduction of food. Lies with his eyes open, but appears to take no notice. Passed urine in bed, last night; no dejection since admission.

Directed to day, croton oil, gtt. i, every two hours, till operation; and forcible administration of brandy and nourishment.

Aug. 7th. No material alteration since yesterday. The remedy prescribed yesterday—drinks and nourishment—all have to be forcibly administered. He resists by closing the teeth and by holding them in the mouth; but, finally, they are swallowed. He has taken four drops of croton oil; no cathartic operation; no evacuation of urine; the bladder is moderately distended. His aspect is the same as on yesterday. He lies much of the time

with his eyes open, but appears to take no notice. Pulse 76, with more volume than on yesterday; respiration normal. From his aspect to-day, and all along, it is difficult to resist the conviction, that the *coma-like condition is simulated*.

After writing the foregoing, and *having made preparations to introduce the catheter*, I had the instrument in my hand and the body of the patient exposed, when *he began to urinate*: at first in small quantity, and with interrupted efforts, manifestly, and then in a full stream until a pint had escaped.

Aug. 8th. No material change. He had a free evacuation from his bowels last evening; he did not pass it in bed, but *disposed his body so as to pass it on the floor. A heated hammer was touched on several points over the spine*; after which he took drink from a cup into the mouth, but held it in the mouth for some time before swallowing it. (The above application was made with a view to the moral effect.) He shrank from the contact of the iron. On applying the iron, heated in warm water, he bore it for a time with considerable patience; but on continuing the application and on stating, *that it was intended to carry the firing over the whole body, he began to make vigorous resistance*, and finally protruded the tongue, and drank brandy and water freely. The firing was then discontinued, with the promise of repeating it and resorting to the red hot iron if marked improvement does not ensue.

Aug. 9th. *Aspect greatly improved*. The improvement under the circumstances stated, is presumed to show that the previous condition was due, in a great measure, to mental perverseness. Now, he takes notice; drinks without effort or difficulty; had free movement from the bowels, and manifested his wish for that purpose. He does not speak; protrudes the tongue when requested; pulse 76. Brandy and nourishment; no other measures.

Aug. 10th. Aspect improved. Takes his nourishment and drinks freely. *Replies to my questions to-day*; says he is better; says he has a little pain in the epigastrium. *In connection with the recovery of speech*, I should note, that *yesterday I took pains to state that if he did not recover it by morning I should resort to severe firing*.

Aug. 11th. Improving. I have directed that he is to sit up before to-morrow, with the *prospect of firing* if he does not succeed. His condition to-day is as follows: he lies with his eyes open and takes some notice; does not speak of his own accord; makes signs when he wishes to urinate; replies to questions in a feeble whisper, and very slowly. He appears to take very little notice. A fan is given him to keep the flies from his face; he

permits them to gather in considerable numbers and then makes a feeble effort to drive them off. No febrile movement; tongue normal. The other day when the firing was resorted to, he used pretty vigorous muscular efforts to escape from the hot iron, and employed his hands for that purpose.

Aug. 12th. This patient is sitting up. He was got up by the attendants, making little or no effort on his own part. He sits in the same position; his eyes fixed in one direction; the lips somewhat separated. Skin cool; pulse slow, and respiration normal. He protrudes his tongue when requested, partially and slowly. He does not reply when addressed. There is considerable difficulty in giving nourishment; he takes drinks only without reluctance. His expression of countenance wears the aspect of the deepest dejection. He observes my movements in the ward, evidently, although he appears to take no notice; but he does not turn his head to watch me as I move to different parts of the ward.

I have directed, that by to-morrow, he must take solid food and masticate it. He has had no dejection; passes urine, and beckoned to the attendant to give him the vessel for that purpose.

Aug. 13th. No material alteration in aspect or symptoms. He has taken a little solid food. Directed him to be carried on to the balcony. He made no effort to walk, *remaining perfectly passive, until threatened with the heated iron.* His mouth remains a little open and saliva flows out.

Aug. 14th. *Marked change.* Expression entirely altered. Takes notice. Greets me with a smile and offers his hand. The improvement began to be manifested yesterday afternoon. Walks of his own accord and with a little aid; and takes his nourishment.

Aug. 16th. Yesterday, this patient was up, dressed, and advanced to meet me, extending his hand. In the afternoon, he again became indifferent, apparently, to external objects, remaining perfectly quiet; his eyes directed to the same object; and refusing nourishment. He remains in this condition this morning. Lies in bed with his eyes open, and takes no notice. Protrudes the tongue slightly when requested; but does not speak. Pulse not accelerated; skin cool. *Resorted to firing over the chest.*

Aug. 18th. This patient remains in the same condition as on the 16th inst. He lies motionless, occasionally turning his head; but rarely, if ever, changing the position of his body. This morning I found him with the eyes open, presenting constantly the same direction, with an expression of vacuity, winking but seldom. This afternoon, they are nearly closed, the lids constantly nictating. He expresses no desires, and appears not to take the least notice of surrounding objects or persons. *Flies* creeping over the

face, lips, and even *upon the conjunctiva, seem to occasion no annoyance.* He has had no dejection since the relapse. He urinated on the 16th, not since, as has been observed. He may have urinated in the bathing-tub when undergoing the cold douche. There is no appearance of distension of the bladder, and the abdomen is collapsed. Rough examination of the abdomen produces no apparent sensation. The respiration and pulse are normal. The skin is warm this evening. He has declined drink and nourishment, by resisting the introduction of any thing into the mouth, and holding it in the mouth, and allowing it to escape, until the cold douche or burning is resorted to. Such measures being used solely with a view to their moral effect. Whilst they are employed, he manifests discomfort by writhings of the body, and exclamations of "Gott, Gott;" afterward, for a time, he takes what is given him. This afternoon, on being requested, he partially protruded the tongue. Yesterday and to-day, I have noticed the pupils to be somewhat dilated. They contract freely on exposure to light.

Aug. 26. Patient is sitting up; has an appearance of *intense abstraction.* The expression of the face is indescribable; although it is that of perfect health, yet it shows the profound occupation of the intellectual faculties in some object of the imagination; the term above employed describes as well as can be, the peculiarity. He does not speak; takes food only on compulsion; protrudes the tongue, partially, on being requested. He urinated night before last, indicating the wish by signs; but he has not been observed to urinate since. Has had no dejection since the relapse. No medicine, except an enema; and firing, if he refuses to take nourishment.

Aug. 21st. Sitting up, and presents the same air of intense abstraction. *After firing* this morning, he protrudes the tongue freely, and took solid food. The enema given yesterday, operated well. No treatment but firing.

Aug. 23d. This patient sits up, dressed, and takes food without difficulty; but he still maintains the same condition as regards silence, motionless position, and countenance of abstraction. The attendant leads him about the ward; he walks slowly, with his eyes fixed on the ground, like a somnambulist. The firing is continued, and it is apparently by this means that he is made to eat and to walk about.

The experiment is now being tried, of *leaving him unsupported*, standing in the center of the ward. (When placed near the door or bed, he slowly extends the hand and supports himself.) He remains perfectly motionless. *After standing about ten minutes, he gradually inclined to one side, and finally dropped down, but evidently in a way not to receive injury.* He managed the fall so as to strike *first the nates*, and protected the head by

throwing out the hands. When placed in a particular attitude, resting against a bedstead, he remains in the same position as long as his strength permits, and then he gradually slides down. He gives not the least sign of observation or interest in persons or things around him; but he *provides for self preservation in falling*. He is led slowly throughout the ward by the attendant taking hold of the ends of the fingers.

Aug. 25th. Yesterday, this patient was somewhat improved: he talked, and he walked about of his own accord; and his expression was totally changed. He ate and drank readily. To-day, he is silent, and takes food with reluctance. *Firing* is to be resumed; and he is to be made to walk in the open air. He is sitting up; and he has the same fixed expression as heretofore.

Aug. 26th. This morning, Jacob *walks about, eats, and talks freely*. His expression is totally changed. Says he has not had a dejection for a long time, and wishes something to open the bowels.

Aug. 28th. Up and dressed all day; walks out of doors; eats well and talks freely. He seems feeble both as respects body and mind. Walks slowly, and talks as if the mind acted slowly. His expression has entirely changed; but he is still disposed to keep his eyes fixed on one object, and presents, except when addressed, a contemplative aspect. He complains of some pain in the abdomen, and says he has a little headache.

I cannot obtain much information respecting the state of his mind before and during the state of ecstasy. He says, in reply to my question, that he was not happy before being ill; but is more so now. He said, to a German patient in the ward, that he had singing in the ears, and this took away his mind; that he recollected most that had occurred during his illness; and that he could not open his mouth to eat; and that "God above could cure him, and He brought about his illness." From another German patient, I learned, that Jacob told him, he had been *crossed in love*, and that this was the occasion of his illness. I can find no evidence that the attack was due to religious excitement.

Sept. 23d. From date of last record to the present time, this patient has been steadily and rapidly improving; exercising daily in the open air; taking his food and drink readily; answering questions; and his expression being quite cheerful.

To-day he leaves the hospital, reporting quite well; and presenting a healthy and cheerful appearance.

ART. III.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, July 7, 1857.

The association met.

Present—The President, Dr. Flint, in the chair. Drs. Wilcox, Miner, Hamilton, Rogers, Dayton, Strong, Newman, Hunt, Hutchins, Lemon, Gould, and Wyckoff.

The reading of the minutes was deferred.

Drs. Austin Flint, Jr., Sylvester Rankin, and ——— Cole, were admitted to membership in this association.

Prof. Flint, from the committee on epidemic pharyngitis, reported that they had nothing new to bring forward.

Prof. Hamilton presented the following specimen:

A specimen of a "colloid cancer," removed from the upper jaw of a woman 25 years old, June 30th, 1857.

The disease had been progressing several years, and at the time of the removal it occupied the right antrum completely, and having involved all of the lower and lateral walls, it protruded far into the mouth, and outward upon the face. The patient had a pale and unhealthy complexion.

An incision having been made so as to lay bare the whole wall of the tumor, the mass was removed entire by the bone-forceps and a strong pair of scissors. The hæmorrhage was profuse, but only the palatine artery required a ligature.

The interior presents the characteristic appearance. The bone composing the upper jaw has been not simply infiltrated, but absorbed, and superseded by the new material. In consistence it resembles jelly, and is of a light straw color, with a tinge of green. Pressing upon it, an abundant serous fluid escapes. Fibrous septa are perceptible even to the naked eye; but submitted to the microscope large bundles of fibres are seen, resembling the white inelastic tissue, with an occasional yellow, elastic fibre, which latter Lebert remarks are sometimes found in these growths. Dr. Dalton, with Dr. Austin Flint, Jr., to whom I submitted the specimen for examination, found also a number of nucleated cancer cells.

I have three times before met with this form of cancer. In Feb., 1851, I removed a tumor of this character from the vulva of a lady, then about 25 years old. It had been growing several years, and latterly the growth had been very rapid. The tumor was of the size of a large cocoa nut, and hung

from the right labium, attached only by a narrow pedicle, and weighing nearly two pounds. It was not tender or painful. I removed it completely with the knife.

On examination of its internal structure, I found it composed of a fibrous structure, with here and there portions converted into a gelatiniform mass, and of a pale yellow, green and pink color.

Six months from this date she thought the tumor had again commenced growing. It was now occasionally sore and a little painful. I have never heard from her since.

Jan. 29, 1851, assisted by Dr. Mixer, I removed a colloid cancer from J. K., æt. 47. The tumor had formed either in one of the glands or in the areolar tissue, of the right groin. At first it had grown slowly, but rapidly during the last year. It was smooth, irregularly round, and elastic, and measured ten inches in diameter at the base. His health was considerably impaired.

On examination after removal, I found almost the whole of this mass gelatiniform, and iridescent, the color changing from yellow to green, according as the light was reflected from it. The green, however, predominated. It weighed three pounds and a quarter.

The wound healed rapidly, but, about two years after, it again began to return, and in a few months was as large as before, and, having ulcerated, it threw out a prolific fungus and bled often.

Since then I have lost sight of him.

June 28, 1851, assisted by Dr. Boardman, I removed a uteaine polypus from a lady, æt. 44. The tumor was at that time projecting eight inches beyond the vulva, and as large as a child's head at nine months. It was smooth and elastic, being covered with a firm fibrous investment. We applied a strong ligature to its pedicle just within the os tincae, and left it to slough off. The separation was soon accomplished, and on examination of the tumor I found it to be composed of a fibrous stroma, with large masses of colloid structure interposed. The color of these masses was a light straw. Its weight was one pound and a-half.

The tumor soon returned, and after a second removal she rapidly sank and died: having survived the first operation only about one month.

Such have been the results thus far in my experience of this class of growths, and whether they are entitled to rank as cancers or not, they seem

to possess a degree of malignancy scarcely inferior to any other forms of tumor.*

Prof. Hamilton then exhibited a specimen of fracture of the cricoid and thyroid cartilages, a description of which was published in the last number of the Buffalo Medical Journal.

He next produced a specimen of fracture of the neck of the femur within the capsule, for the privilege of presenting which he was indebted to the kindness of *Prof. Crosby*, of Dartmouth College. The patient, a lady, after meeting with the accident, recovered so as to be able to walk very well; but her case was one of very difficult diagnosis. She was seen by many surgeons, some of whom considered it a dislocation, others a fracture of the neck, and others still a fracture of the rim of the acetabulum. A post-mortem examination revealed the condition here presented. The neck was almost entirely absorbed, the opposing surfaces of the fracture manifesting no attempt at union, and the surfaces laminated and eburnated.

Prof. Hamilton commented at some length on the probabilities of a union within the capsule. He said that there were eleven specimens, claimed to be unions within the joint, now in the United States. Of these he had seen about half, and he would say that none of them were indubitable. Some of them might be, but none of them could be conclusively proved to be unions within the capsule.

Prof. Hamilton also presented a specimen of a foreign body removed from the knee-joint by *Dr. Crosby*. It was the segment of a sphere of bone evidently a portion of the external condyle of the femur somewhat eburnated by long friction. A young man suffered a severe wrench of the joint, and subsequently suffered repeated attacks of pain. *Prof. Crosby* removed the foreign body exhibited, by operation. The dimensions of the fragment were as follows: vertical diameter, one inch and five-eighths; left border half an inch in thickness, decreasing toward the right border. The case is remarkable as showing that a portion of the condyle of the femur can be fractured into the knee-joint, removed by the knife, and the motion of the joint preserved.

Dr. Strong gave a history of a case in which he diagnosed Bright's Disease in a woman about to be confined. She had extensive œdema of

* NOTE. The three last cases have been previously reported in the tables furnished by *Dr. Hamilton* to *Dr. Gross'* paper, on the "Results of Surgical Operations in Malignant Diseases," and published in the Transactions of the Amer. Med. Association for 1853.

the limbs and puffiness of the face; the urine was albuminous. This lady has since been confined without untoward symptoms. The probability was that she would have had puerperal convulsions. That she did not, Dr. Strong was inclined to attribute to the fact that chloroform was administered during the labor, not to entire anæsthesia, but to a sufficient extent to modify the pains.

Dr. Hutchins inquired if Dr. Strong considered albuminuria, during pregnancy, as an infallible premonitory sign of puerperal convulsions?

Dr. Strong replied that he did not, but when the symptoms were as prominent as in this case, and as strongly indicative of Bright's disease, he should feel anxious about his patient. The cedema was extensive in the limbs and in the face. She had also considerable impairment of vision.

Prof. Hamilton inquired if the President had met with Dr. Isaacs' recent paper, in which he states that a healthy human kidney was rarely met with?

The President had not, and could not himself answer as to the justice of the statement.

Dr. Miner asked if, supposing that the case was admitted to be Bright's disease, with considerable anasarca, would there be from that fact alone any sufficient reason for apprehending puerperal convulsions during confinement?

Dr. Strong thought there would. In reply to further questions he stated that he did not express any positive opinion as to the effect of the chloroform.

Dr. Newman remarked that since Dr. Simpson had called attention to these cases, it had become evident that albuminuria was much more frequent in pregnant women than it had heretofore been supposed to be, though usually it resulted from congestion and not from fatty degeneration. Authors nearly all now took the view that convulsions were likely to occur in such cases from the poison in the blood, and patients should be carefully watched even for a week or ten days after the event of labor.

Dr. Hutchins had seen, within the last month, six cases of an eruptive disease, four of them in the same family. One of them was unquestionably measles, the others had a vesicular eruption, with pustules containing fluid. All of these cases had some bronchial affection and sore throat. He was undecided as to the character of these cases.

He had also seen four cases of what the patients had supposed to be some disease of the kidneys, manifested by considerable pain. No albumen was present. On applying nitric acid the urine became very red, much lime was present under the microscope. There was also a slight cheesy discharge

from the urethra. There was no reason to suppose any venereal cause in these cases. They all recovered within three or four weeks.

Dr. Newman proposed *Drs. C. B. Fanner and Henry Nichell* for membership in this association.

Dr. Wilcox moved that a committee of three be appointed to report on the subject of albuminuria in pregnancy.

Drs. Newman, Strong and Hutchins, were appointed such committees.

Prof. Hamilton moved that *Dr. Miner* be instructed to report on the subject of dissection wounds, at the next meeting.

Dr. Rogers reported the case of *Dr. Ebenezer B. Pulling*, who assisted him in the examination of a woman who died of hæmorrhage. In the course of a few hours *Dr. Pulling* complained of pain in a finger which he had wounded. From a point in the finger the swelling spread to midway the arm above the elbow, and was there arrested. Soon after, however, the swelling commenced on the same finger of the other hand, and spread thence almost over the whole body. It proved fatal, and this case was the beginning of a fatal epidemic of erysipelas, the first case of which was a clergyman who had acted as a nurse to *Dr. Pulling*.

Prof. Flint presented a practical point. *Dr. Ware*, of Boston, had recently inquired if the profession here used whisky in tuberculosis. He said that the profession in Boston preferred whisky to other stimulants, and the coarser kinds of whisky in preference to better varieties. This fact is attributed to the greater quantity of fusel oil in that liquor. *Dr. Flint* had used other forms of stimulus, but mentioned cases in which whisky had seemed to be very beneficial.

Prof. Hamilton thought that whisky was the probable cause of sore legs and ulcers among the Irish.

Section 5, Chapter II, of the By-laws, was amended by striking out the words "two dollars on" from the last sentence of the by-laws.

And the association then adjourned.

SANFORD B. HUNT, Secretary.

ART. IV.—*Powers of County Medical Societies. John D. Hill vs. The Erie County Medical Society.*

Supreme Court.—The People *ex. rel.* John D. Hill *vs.* The Erie County Medical Society.

This cause was argued at the May Special Term. Sherman S. Rogers, Counsel for Relator; and Isaac W. Thompson, Counsel for the Defendant.

An alternative mandamus had been issued in the case, to which the defendant made return.

The cause came up for argument upon demurrer to a replication interposed to the relator's plea.

The object of the proceeding is to compel the defendant to restore the relator to the enjoyment of his privileges as a member of the society, from which he had been expelled because of an alleged infraction of the tariff of prices adopted by that society. That infraction consisted, as was claimed by the defendant, in taking the office of physician to the Alms' House of Erie County, for a less sum than the minimum price fixed by the tariff.

The nature of that tariff, and the history of its adoption, are set forth in the opinion of the court in the case of *The People, ex. rel. Grey*, in which case most of the questions here arising were presented.

It was claimed, however, in this case, that the relator never was a member of the society, he not having filed a copy of his diploma with the Clerk of Erie County at the time he made application for membership, and not having signed the laws of the society. It appeared from the pleading that, notwithstanding his failure to do these things, he had been for several years acting as a member of the society; had been an officer thereof; paid dues, &c., and in all respects been recognized and treated by the society as a member, until after his alleged illegal expulsion for non-compliance with the tariff of prices.

The case was decided yesterday,—the court maintaining the demurrer, and holding that the relator was entitled to a restoration of all the privileges as a member of the society.

The following are the conclusions arrived at by the Court, Marvin J.:

1. "Dr. Hill was a lawful member of the society notwithstanding he had not filed his license with the county clerk, and did not sign the by-laws. He was recognized for years as a member, and enjoyed all the rights and privileges of a member. He was expelled for the reason that he did not conform to the regulation of the society touching the tariff for services. The

society cannot now change its ground, or resort to the objections, highly technical, that he had not filed his license, or signed the by-laws.

2. "The relator was illegally expelled for the reasons stated in my opinion in the case of *The People ex. rel. Gray*.

3. "The issues of the fact joined are not material, and it cannot be necessary to send them to a trial by jury. Upon the conceded facts in the case the relator is entitled to the relief he asks. There must be a peremptory mandamus."

At the same term at which this cause was argued, a motion *ex parte* Eldred P. Gray, was made upon which the court took the papers, and yesterday upon granting the motion, read the following opinion:

The relator represented that he had been duly licensed to practice as a physician and surgeon in this state.

That at a regular meeting of the Medical Society, in the County of Erie, held in January, 1850, he was duly admitted a member of the society.

That at a semi-annual meeting of the society held in June, 1854, a tariff of fees for medical services and medical appointments in and for the city of Buffalo and Erie county, was adopted in the absence of the relator, viz:

For Physician to the Almshouse of the county, \$6.00 as the minimum price.

For Physician to the Penitentiary of the county, \$3.00 as the minimum price.

For Physician to the Jail of the county, \$1.50 as the minimum price.

For Physician to the Poor of the city of Buffalo, for Medical District, No. 1, \$2.50; District No. 2, \$1.25; District No. 3, \$1.25; District No. 4, \$1.00.

For attending Coroner's Inquests, post-mortem examinations, \$10, and for viewing body, \$5; mileage to be charged according to the rates of the Buffalo fee-bill.

For Health Physician of the city of Buffalo, \$1000 as the minimum price.

The society at the same meeting, also adopted a resolution that it should be dishonorable for any member of the society to accept any appointment or perform any service contained in such tariff of prices, at a less sum than therein specified.

In October, 1855, the relator was appointed by the Board of Supervisors of the county of Erie, to visit the jail and perform the medical services, that were required during the year then ensuing at and for the compensation of

one dollar a visit. The relator accepted the appointment and entered into an agreement with the Board of Supervisors, and entered upon the performance of the agreement.

At the semi-annual meeting of the Medical Society, certain proceedings were had in relation to the relator, and a committee was appointed to report upon the subject of complaint.

The committee reported among other things, that the relator had been guilty of an infraction of the laws of the society, and reported certain resolutions which were adopted by the society.

1. That agreeing to serve the public authorities for any other minimum amount and by any other manner of compensation than by salary, as fixed by the rules of the society is a clear and palpable infraction of its laws.

2. That the action of Dr. Gray in accepting office as admitted by himself before the society this day, merits and hereby receives an expression of the disapprobation of the society; and that provided he immediately retires from the position which he holds in violation of the rules of the society, further action in the case shall be waived.

A copy of these resolutions was served upon the relator, who declined to retire from the position he occupied under his contract with the Board of Supervisors. At an adjourned meeting of the society, the relator was, by a vote of the members of the society, expelled from the society for the cause here stated.

At a subsequent meeting, the society refused to recognize the relator as a member of the society, and to receive his vote at an election of officers of the society.

The affidavit of the relator contained a very full and minute statement of the facts relating to the question of his rights, and his expulsion from membership, but the facts as here briefly stated, are sufficient to present the real question, and the question discussed by the courts.

James G. Hoyt, for Relator.

Marvin, J.—The motion must be granted. It is impossible in any view which I have been able to take of the question presented by this motion, to sustain the action and position of the "Medical Society of the County of Erie." The society has mistaken its rights and powers. It will be important to ascertain what this corporation is; the object of its creation and the powers with which it is clothed; so far at least, as to determine whether it was vested with the power exercised in the present case.

The corporation has its existence under the act "to incorporate Medical Societies *for the purpose of regulating the practice of physic and surgery*

in this State," passed April 10, 1813. The practice of physic and surgery in the city of New York, was regulated by law as early as 1760, and general regulations for the whole State were adopted in 1796, by which the Chancellor, a Judge of the Supreme Court or Common Pleas, or a Master in Chancery, were authorized to license physicians and surgeons to practice. In 1806, an act was passed establishing Medical Societies in the State, and a State Medical Society, and repealing the former act. The act of 1813 was a revision of the act of 1806.

It is important to notice the preamble to the act of 1813, that "Whereas well regulated Medical Societies have been found to contribute to the diffusion of that science, and particularly the knowledge of the healing art."

The first section makes it lawful for the physicians and surgeons in the several counties of the State, who were then authorized by law to practice in their several professions, except in those counties where medical societies had been incorporated, to meet together and choose the officers named in the act, and upon being so organized it was declared that such societies should be bodies corporate and politic.

The Medical Societies of counties already incorporated were to continue to be bodies corporate and politic.

The act contains many provisions touching the meetings and proceedings of the societies.

They are authorized to examine students, and for this purpose to appoint censors and to give diplomas.

By the 13th Section, the societies are authorized to make such by-laws and regulations relative to the affairs, concerns, and property of said societies; relative to the admission and expulsion of members; relative to such donations or contributions as a majority of the members at their annual meeting shall think fit and proper: provided that such by-laws, rules, and regulations be not contrary to, nor inconsistent with, the constitution and laws of this State, &c.

The power is here given to make by-laws and regulations relative to the *admission and expulsion of members*. It is in general terms. But this is not an arbitrary, unlimited power. The by-laws, rules and regulations are not to be contrary to nor inconsistent with the laws of the State.

Regarding the tariff of prices for medical services adopted at the semi-annual meeting in June, 1854, as a regulation, the question will arise whether it was a valid regulation authorized by law; and whether for a violation of it by a member, the society had the power of expulsion.

A serious doubt may be here raised, whether, if the matter of the regulations is not objectionable it ever had any binding force.

This regulation was made at a semi-annual meeting of the corporation. The statute only authorized the society to make by-laws and regulations at its *Annual Meeting*. It may be very important that the power to make by-laws, rules and regulations, for a violation of which penalties upon members may be imposed, should only be exercised at the *Annual Meeting*, or at certain times fixed by law, so that all the members may know in advance and attend. But I shall waive this question, and proceed at once to the important question in the case, whether the society had the authority to establish such regulations, and for a breach of it to expel the relator.

It is declared by one of the by-laws of the society, that every member who shall neglect or refuse to comply with the by-laws and regulations of this society, &c., &c., shall be expelled from said society upon a vote of a majority of the members present. This can, of course have no application except to a neglect or refusal to comply with such by-laws and regulations as the society was authorized by law to make, and also to enforce by expulsion.

When a corporation is duly created the law tacitly annexes to it the power to make by-laws or private statutes for its government and support, so that this corporation in the present case, would have had the power to make by-laws had the statute been silent upon that question.

It is usual to confer the power by the charter or law authorizing the corporation.

If the power is expressly conferred and in general terms, it is construed as an authority conferred for the purpose of enabling the corporation to accomplish the objects of its creation, and the power in its exercise, is to be limited to such objects or purposes. Ang. & Ames on Cor. 268, 2d Kent's Com. 296. Grant on Cor. 76.

A by-law must not be at variance with the general law of the land. It must be reasonable and adapted to the purposes of the corporation. Kent says these corporate powers of legislation must be exercised reasonably and in sound discretion, and strictly within the limits of the charter, and in perfect subordination to the constitution and general law of the land and the rights dependent thereon. Subject to these limitations, the power to make by-laws may be sustained and enforced by just and competent pecuniary penalties. 2d Kent Com. 296. Grant on Cor. 76. Ang. & Ames, 275, 281, 286. *Rex vs Tho. Cooper*, of Newcastle, 7, 1, R. 548. 3d East. 186.

What were the objects and purposes of this corporation? In the preamble

to the act, the legislature say: that well regulated Medical Societies have been found to contribute to the *diffusion of true science, and particularly the knowledge of the healing art*. The act then authorized the physicians and surgeons in the several counties of the State, to meet and choose certain officers, and when so organized declared them to be bodies corporate and politic. It provides for the examination and licensing of students, and for the mode of managing its affairs. Can it be said with any plausibility, that the establishing of a tariff of prices for medical services, was a legitimate object of the creation of the corporation, or that it was necessary, or in any degree contributed to the accomplishment of the purposes or objects for which the law authorized the corporation?

I can see no connection between the purposes to be accomplished by the creation of the corporation and its regulation touching the compensation to be exacted by its members for services to be rendered to the public authorities of Erie county and the city of Buffalo. And I have not understood the corporation or its counsel as putting the vindication of this regulation upon such a ground, and yet as we see by the well settled rules of law, unless it can be vindicated upon such ground, it cannot be sustained as a regulation or by-law binding upon the members of the corporation.

All the purposes of the corporation can be well accomplished without interfering in the least with the natural and private rights of each member to agree with the public authorities or others for such compensation for his services as he may please. The rule established by the society is unreasonable, but not that it fixed an unreasonable price for the specified services. As to that I do not know; but it is unreasonably restraining and oppressive upon its members. It interferes with their private rights.

The regulation was not only unauthorized by the law, but it is in conflict with well settled principles of law. It was the result of a combination to coerce the public authorities of Erie county and the city of Buffalo, to make a certain compensation for certain medical services, not less than a minimum sum fixed. Such a combination is, I have no doubt, unlawful at common law. It is in restraint of the right of the public authorities and the individual members of the society.

It is made the duty of the superintendents of the poor to appoint a physician for the Poor House. Act of 1851, 532. And yet if the regulation of the Medical Society of Erie County is to prevail, and is to be obeyed by the members of the society, the superintendents of the poor will not be able to procure the medical services of any one of the members of the society without paying the compensation fixed, and without any regard to the stat

of health of the county poor, or the amount of services that may be required. A physician entirely competent may be willing to render the services for half the sum fixed in the tariff, and yet if he adhere to the regulation he must decline the employment. This entire regulation is in conflict with the law of the land, and cannot be sustained. It conflicts with the law and its policy, in relation to contracts and trade. The law permits and encourages great freedom in contracts and in trade, and is constantly inviting competition. The skill of the professional man is his capital in trade, and he has a right to employ it for a compensation, satisfactory to him, and thus obtain a livelihood. *Ang. & Ames on Cor.* 275, 3 East, 186. 1 Bl. Com. 476.

Durham vs. Trustees of Rochester—where a by-law was held to be unauthorized as not being prudential, and as being against the freedom of trade.

In the *People vs. Medical Society of New York*, 3 Wend. 426, it was held that an initiation fee may be demanded from physicians and surgeons on becoming members of County Medical Societies. It was held that such charge was not contrary to or inconsistent with the laws of the State, and that it was usual in most societies of this kind. It might well have been added that by section 15 of the Act of 1813 the power to charge an admission fee is impliedly given.

Enough has been said, I think, to show that the regulation in question was wholly unauthorized, and that it conflicts with public policy and the general law of the land. It follows that the expulsion of the relator was unjustifiable.

It seems to have been supposed, that having adopted this regulation, and having provided in the by-laws that every member who should neglect or refuse to comply with the by-laws and regulations of the society, should be expelled upon a vote of the majority of the members present, the society had the right in the way of discipline to expel a non-complying member. The rights of a member do not depend upon so frail a tenure. They are rights regulated and protected by law.

The society is not simply a voluntary association of gentlemen for social purposes or mutual improvement under rules and regulations adopted by themselves. But it is organized under the statute, and such organization is a corporation. Its powers are derived from the statute and its members have certain well defined and valuable rights. Such rights are a franchise, and expulsion is disfranchisement. I shall not stop here to show the importance of the relator's rights as a member of the society. The law has

made it his duty to become a member. That his rights were important and valuable, is not denied.

Expulsion or disfranchisement is a matter of serious import, and it is important to advert to some of the rules of law relating to such questions. Disfranchisement is defined to be the taking a franchise from a man for *some reasonable cause*.

Grant on Cor. 263.—The author remarks that to entrust corporations with an arbitrary power of this kind would tend greatly to disturb the peace of corporations, and to defeat many of the objects of their institution, for it would furnish ready means to an unscrupulous majority of compassing many private and personal objects of their own by means of the corporate character. The legal causes of disfranchisement are thus stated: 1. Offences against the corporator's duty to the corporation as a member of it. 2d. Offences of a heinous, infamous character, affecting the corporator's duty as a subject, and being indictable at common law. 3d. Offences compounded of the two. It will not be necessary to notice the 2d and 3d causes. Was the relator guilty of any offence against his duty of the corporation?

It has been laid down as a rule, that such offences consist of "things done which work to the destruction of the body corporate, or to the destruction of the liberties and privileges thereof." Grant on Cor. 264. 2 Kent Com. 297 to 299. Ang & Ames on Cor. 349, 350.

This rule may be somewhat too restricted in some special cases, but it is the general and leading rule rarely departed from. If the member does acts calculated to destroy the corporation or its liberties and privileges, he may be disfranchised. He thus forfeits his right to membership.

The Commonwealth *vs.* St. Patrick's Benevolent Society, 2 Binney R. 441, is much in point in this case. In that case by a by-law *vilifying a member*, was declared to be a crime against the society, and for such crime expulsion was authorized. One of its members was convicted under this by-law and expelled.

The court, after stating and recognizing the above rules, declared the by-law void, and ordered the restoration of the expelled member. The test applied was, whether the by-law was necessary for the good government and support of the affairs of the corporation; and it was held that it was not, and that without an express power in the charter, no man can be disfranchised unless he has been guilty of some offence, which either affects the interests of good government of the corporation, or is indictable by the law of the land.

Fawcett *vs.* Charles, 13 Wend. 473, is instructive upon this question. In

that case it was held that a county Medical Society had not the power to expel a member for the cause that he did not possess the requisite qualifications and obtained his admission by false pretences. The leading rules as above stated, are referred to with approbation, and it was held that such society being a body corporate has the power of expulsion as an incident to its constitution; that the power cannot be exercised without a previous conviction on indictment in a criminal court for the offence charged, except when the offence relates merely to the official or corporate character of the accused, and amounts to a breach of the condition expressly or tacitly annexed to his franchise.

By the Rev. Stat. concerning the practice of physic and surgery in this State, county medical societies are authorized to prefer specific charges against any member of gross ignorance or misconduct in his profession, or of immoral conduct or habits. These charges are to be tried by the Judges of the county court; and if they find the charges true, they are to make an order expelling the member from the society or suspending him for a limited period. R. S. 452-3.

I refer to these provisions of the statute in connection with the three general rules as above stated, touching the power of corporations to disfranchise a member for the purpose of calling attention to the nature of the charges, gross ignorance, misconduct in his profession, immoral conduct or habits, and remarking that the legislature is supposed to have understood the rules as established by the common law, and that the cases specified in the act, did not or might not come within those rules so as to authorize the societies to try the member and expel him, hence the legislature provides the remedy as specified in the statute. It did not confer the power upon the medical societies, but upon the Judges of the county court. Here is a legislative intimation, showing the extreme care taken of the rights of members of these societies, and admonishing the societies that their power of expulsion over its members is not arbitrary, but confined and carefully restricted to the causes ascertained by the common law. See matter of Newell Smith, 10 W. *ex parte*, Paine 1, Hill 665.

I have examined this case at greater length, perhaps, than was necessary. The people upon the relation of Hill against this society presenting the same and other questions arising upon the pleadings was argued very fully at the same time. In the present case it was conceded that the papers upon this motion presented fully and fairly the real question between the parties. The controversy between the society and the relator seems to have been conducted in a spirit of fairness, frankness, and courtesy—the society claiming

the right of expulsion for the cause stated, and the relator controverting such right. The society is clearly in the wrong. The rights of its members to the enjoyment of their franchises are more secure than the society seems to have supposed, and the law will protect each member in the enjoyment of his rights until such rights have been legally forfeited.

1. The regulation in question was unauthorized.
2. It was unreasonable.
2. It was against public policy and the law.
4. The disfranchisement of the relator was unauthorized and illegal.

It follows that he must be restored or recognized as a member of the medical society, and permitted, without molestation, to enjoy all the rights and privileges as a member.

ART. V.—*Clinical Reports of Diseases, Injuries, Surgical Operations, &c., &c., in the Male and Female General Surgical and Private Wards of the Buffalo Hospital of the Sisters of Charity.* Care of Prof. HAMILTON, for the winter half year commencing Oct. 1st, 1856. By BENJ. H. LEMON, M. D., formerly House Surgeon.

(Continued from Page 102.)

CASE V.—*Uncomplicated, Idiopathic, Congenital Capsulo-Lenticular Cataract of both Eyes. Operation on one. Good result.*

Drusilla H., aged 6, a sprightly child, with fair complexion, light hair, and blue eyes. Admitted with her parents Oct. 13th, to a private ward.

The peculiarity in her eyes was first observed when she was three months old. She has never been able to go about without guidance. Has cataract of both eyes; can distinguish bright colors when not in too strong a light; the irides are normally sensitive; vision seems best in the right eye.

The solution of atropia having been dropped into the eye and applied to the brow, caused dilatation of the iris in a short time; this improved the sight. Nothing contraindicating, Dr. Hamilton determined to make the posterior operation for laceration of the capsule, and reclinacion of the crystalline lens. He accordingly—the iris being well dilated—introduced the needle through the sclerotic at a point two lines from the circumference of the cornea, and one below the equator, or transverse median line of the globe, carrying it through the posterior chamber until the point of the instrument came to the centre of the cataract, then lacerating and comminuting

the capsule, and finishing the operation by reclining the lens within the vitreous humor. The cataract was soft, and kept the position in which it was placed. The patient was now able for the first time to see the features of her parents; she expressed no astonishment, but the medical students being present, said "she saw men."

Ordered to be kept quiet in a moderately dark room, muslin clothes saturated with cool water, to be constantly applied to the brows.

With the exception of some redness of the conjunctiva, nothing to be deprecated occurred after the operation; subsequently when sufficient time had elapsed, vision was found to be comparatively good, and available for ordinary purposes.

It was thought proper to defer the operation on the right eye that the first might recover; the shock to the system being much less, and the risk of the sympathetic influence for evil of the one organ on the other being avoided; and to operate on the worst of the two that data might be gathered which would serve as guides for the second; as in a first operation there may be discovered some constitutional peculiarity of bad tendency which may be in some measure partially or entirely avoided, or another mode of operating be thought most suitable to the peculiar circumstances of the case.

"Cataract may exist at all periods of life, no age being exempt, from the fœtus in utero to that beyond the natural limits of man's existence; it appears to belong, as an idiopathic affection, more properly to infancy, when it is mostly capsulo-lenticular; and to advanced years when it is lenticular. Of the exact nature of the change that produces the opacity, and the processes that regulate it we know little; idiopathic lenticular cataract cannot be accounted for, pathology and physiology do not afford any elucidation."—*Walton's Operative Ophthalmic Surgery.*

"For the performance of reclinatio the curved needle is alone required. It is indispensable that the pupil be fully dilated. An anterior operation through the cornea has been proposed and adopted, but is most inappropriate; it is only by passing the instrument through the sclerotic that sufficient command can be obtained for proper displacement. — *Ibid.*

"It is a grave objection to displacement that in performing it the interior of a healthy eye must necessarily be considerably damaged. No condition of the vitreous humor can be said to be favorable to the operation. When from morbid change it yields readily to pressure there is danger of the cataract gravitating and resting on the retina; or floating about, and producing constant annoyance by temporarily interrupting vision; besides it is then peculiarly liable to be dislocated through the pupil. — *Ibid.*

Mr. Walton's work gives no statistics of the cures effected in various kinds of cataract by the several modes of operating; but the American editor in a note says, "From a statement of the operations by sclerotic puncturation in Wills' Hospital, it appears that the cures constitute about four-fifths of the whole number of cases operated upon in that institution."

CASE VI.—Lenticular Cataract of the Right Eye. Complicated with Amaurosis. Complete loss of vision in the left from Atresia Pupillæ. Operation, by reinclination on the right eye, partially successful.

Joseph Morgan, æt. 20, Irish; of morbid, plethoric habits. Admitted to ophthalmic ward, January 2d.

Vision of the left eye began to fail fourteen years ago. *Muscæ volitantes* being a prominent symptom for a long time, the sight grew worse gradually until inflammation of the whole eye and occlusion of the pupil took place as a consequence; and vision has been lost in this organ for some years. The iris being adherent to the cornea and the almost certainly existing amaurosis and cataract, forbid any surgical interference. The right eye has been available for ordinary purposes, until four months ago, from that time the sight has rapidly failed until the present, and he is now unable to walk without being guided, and can only distinguish daylight from darkness. He can see the shadow of the heavy part of the window frame on a bright day, but fails entirely to see a chaplet of bright colored flowers hanging on the wall. The symptoms being "a dirty white film, interspersed with dancing black specks, over all objects, corruscations of light, pains, &c."

There was found to be lenticular cataract, complicated with amaurosis and conjunctivitis, the eye seeming to have a tendency to inflammation. The iris is healthy and normally sensitive to light and belladonna.

In view of the existing complication it was decided not to operate, as removing the lens would only lead to very temporary benefit, if not altogether useless; but to resort to such remedies as would improve his general health.

Feb. His condition is much improved; the inflammation has disappeared, but vision has not gained at all with his general health.

At the repeated urgent solicitations of the patient to have an effort made to restore his sight, Dr. Hamilton consented to operate.

The iris being well dilated by the application of sol. atropia, the sclerotic was punctured one and a-half lines from the edge of the cornea, in the transverse diameter of the globe.

The lower border of the upper portion of the iris was adherent to the

capsule; the needle was carried through the posterior chamber to this point, and the iris detached; then lacerating the capsule the operation was terminated by reclination of the lens within the vitreous humor, the cataract maintaining the position in which it was placed.

Scarcely any change in vision took place, amaurosis being as complete as anticipated.

Directed to stay in a darkened room; cloths saturated with cool water to the forehead; feet warm.

Seven days after operation on trying his eye, thinks the sight is improved, as he can see the small bars in the window, but cannot distinguish the different colors of the flowers on the wall. The tenth day iritis supervened. The solution of atropia to keep the pupil constantly dilated; inflammation soon disappeared.

He remained in the house a long time, but neither his general health, nor his eyesight continued to improve.

On leaving the hospital the sight was in the state last mentioned, and little expectation entertained that it would ever be any better.

"In amaurosis the movements of the iris are generally impaired or lost, directly that vision is affected; and dilatation of the pupil with irregularity is common. Yet in some cases of total blindness, where the disease lies in the brain or behind the retina, the pupil may act as in health."—*Walton's Operative Ophthalmic Surgery.*

"Richter and Baron Wenzel, make mention of these peculiarities, and the latter refers the phenomenon to the iris deriving its nerves wholly from the "*lenticular or ciliary ganglion*," while the immediate organ of sight is constituted entirely by another distinct nerve.* Hence motion of the iris is not an infallible criterion as some authors have stated, that the retina is endued with sensibility."—*Samuel Cooper's Dic.*

"Although it is impossible, in particular cases, to say with certainty whether the faintness of the perception of light, be owing to the intensity of the opacity of the cataract, or to a diseased retina, still, generally speaking, the degree of vision is in proportion to the opacity of the pupil, and its amount affords a pretty sure index of the health of that tunic."—*Walton.*

"The capacity of distinguishing light from darkness, and in a shady place where the pupil is not too much contracted, of perceiving bright colors, and

* Vide Carpenter's Principles of Human Physiology, pp. 697 and 831, sections 724 and 847. For nerves that influence contraction and dilatation of the iris.

the shadows of objects, is as Scarpa has particularly noticed, a very important desideratum in every case selected for operation."— *Cooper*.

"A body, such as a penknife, or the finger, should be passed between the patient's eye and the light, as a test of sight; if he perceives it, the retina may be considered sound, but unhealthy in proportion as only larger bodies can be discerned.

"An operation, when it evinces feebleness, must ever be attendant with doubtful results. With total loss of power, any practical surgical proceeding is inadmissible."— *Walton*.

"The concurrent testimony of almost all writers upon the subject, tends to prove that the restoration of sight has sometimes been effected in the most hopeless cases; and I am, therefore, of opinion with Mr. Lucas, that in all doubtful cases an operation should be tried, as a remedy by no means hazardous or violent."— *Cooper*.

Remarks.— From the foregoing quotations it may be inferred that amaurosis and cataract, in the incipient stage, when coëxistent in the same organ, would cause a greater degree of blindness than either singly, when in an advanced stage of the disease. The former, seeking a strong light, because the unsound retina requires a greater impression than in health. The latter, preferring the shade, that the iris may be dilated, and thus light admitted at the circumference of the cataract, the opacity of the crystalline lens being the most intense at its central point, strong light would stimulate the pupil to greater contraction, thus increasing the blindness.

These diseases, therefore, when existing together in the same organ, even in a slight degree, would tend to cause a great amount of blindness; that which is beneficial to either, when present singly, becomes detrimental to both when the complication exists.

ART. VI.— *Amylene*. By JOHN G. ORTON, M. D., Binghampton,
Broome County, N. Y.

Prof. S. B. HUNT, M. D.:

Dear Sir,— As every recorded trial, I believe, which has been made in this country, with this new anæsthetic agent has resulted in an entire failure, it affords me much pleasure to report to you the following *successful* case of its administration:

On the 26th of June last, with the aid of the improved French inhaler, I administered about 3iii of amylene to a strong robust patient, and effected complete insensibility in two minutes. The operation to be performed was one likely to give the anæsthetic a fair trial, namely, the removal of the large nail from an extensively diseased and highly sensitive toe. The patient manifested not the slightest uneasiness during the operation, but amused herself in an examination of the inhaling apparatus.

The pulse was but slightly accelerated, and no coughing nor vomiting ensued; in short, not a single unpleasant symptom manifested itself during or succeeding the administration.

I am strongly inclined to believe that the so-called samples of amylene which have been heretofore used by experimenters in this country, were not chemically the same as that used in Europe, and that they possess no anæsthetic properties whatever. I perceive that the surgeons of New York city have given it, as they say, "a fair trial," but without success.

The specimen of amylene which I used in the case here reported, was sent me from London, by a friend, Dr. Snow, of King's College Hospital, where, he informs me, he has used it successfully in 181 cases. I have been constantly in the habit of using the various agents commonly used for the production of anæsthesia, and I must confess that I was exceedingly pleased with the use of amylene in the instance recorded. One peculiarity was noticed, which is worthy of remark, namely, that almost immediately on the removal of the inhaling instrument from the patient sensibility returned, and the patient was able to rise from bed with scarcely any feeling of dizziness or unpleasant sensations of any sort whatever.

This case, as it is the *first successful* one which has been reported in this country, is of interest to the profession, as it reestablishes the practicability of its administration, and the importance of obtaining a pure article.

I shall continue my experiments with amylene as occasion affords, and report to the profession accordingly.

BINGHAMPTON, July 6, 1857.

ART. VII.— *On the Diseases of Women; including those of Pregnancy and Childbed.* By FLEETWOOD CHURCHILL, M. D., T. C. D., M. R. I. A., Vice-President and Fellow of the King and Queen's College of Physicians in Ireland; one of the Presidents of the Obstetrical Society, etc., etc., etc. A new American Edition, Revised by the Author. With Notes and Additions by D. FRANCIS CONDIE, M. D. Philadelphia: BLANCHARD AND LEA. 1857.

This work of Dr. Churchill is an old and familiar friend in a new and greatly improved dress. A succession of editions has attested the general favor with which this work on Female Diseases has been received by the profession. The present edition has, perhaps, superior claims upon the American medical profession, for it has had the personal revision of the author, and he gracefully "Dedicates it to the Members of the Medical Profession in America, as an expression of his admiration for their Intelligence, Energy and Scientific Attainments; and of his gratitude for the kind approbation they have extended to his works."

Besides a general and elaborate revision, which includes numerous additions, three entire chapters have been added on tetanus, paralysis, and arterial obstruction, as they occur during gestation or in the parturient female. Additions have also been made by the American Editor, Dr. Condie;—for it would seem that as a matter of necessity every foreign author must have an editor to give him credence, or to stand sponsor for, or to soften and modify the doctrines taught, for fear the pure and unadulterated original would be of difficult interpretation, or lead to serious errors in practice.

A review in the ordinary acceptance of the term, is not to be expected of a work which has been so long before the public, and been so frequently the subject of critical examination and notice. We shall not even attempt to designate the numerous subjects treated in the volume, for our space would but render any such allusion little better than the page of an ordinary index. We design to notice only, the prominent additions made to this volume which mark it particularly in contrast with previous editions, and such other subjects as may from their prominence claim for them more particular notice. It is sufficient to say that the work covers very completely the whole of the ground embraced in that multitude of ills known as "female diseases," and the different subjects appear to be treated as fully as is possible for them to be in the compass of a volume. The authorities quoted are carefully acknowledged in notes, and the references are copious, showing the amount of labor bestowed upon the preparation of the volume. Such a

work of course does not necessarily display any very great amount of originality in the author,—the honors of the discoverer are the rewards of but a very few of all those who really toil,—but he is most certainly not undeserving of commendation who so successfully tills the soil of medical literature as to be capable of separating the tares from the real grain, and presenting to his brethren in one sheaf all that is valuable, from the seed broadcast through a long succession of years, and from the hands of a multitude of sowers. Indeed, to the credit of Dr. Churchill for honesty, he has never claimed originality for his work, for in the preface to the first edition he says, "it will be evident that the volume has no higher pretensions than that of being a compilation, with the addition of whatever information I may have acquired from hospital or dispensary practice. I have endeavored to ascribe each opinion to its true author, and to appropriate none that are not strictly my own." The present edition comes to us, "with a sincere hope that we will find it improved. Time has given him more experience, and the records of science show that others have not been idle. He has most carefully revised the work, pruning what appeared to be exuberant; enlarging what appeared defective; and adding the results of others' experience and his own."

To ourselves one of the chief merits of the volume is the excellent order and system of classification which is observed throughout the volume. There is no difficulty in turning at any moment, to any subject upon which it treats. Commencing with the diseases of the *external* organs, the work systematically pursues its course through the consideration of all the diseases to which the female genital system is obnoxious, either in its virgin state, or in the changes wrought during gestation, or the nearly innumerable sequelæ which follow too often in the train of the crowning effort of the uterus, parturition.

In conformity to the intention which we have already intimated, we shall first proceed to notice the three chapters which are newly added to the present edition, and after that follow the subjects as far as time, and our limited space will allow.

Tetanus.—Dr. Churchill observes, although a very fatal affection, has been considered so rare an attendant upon childbed that it is scarcely noticed by any writer upon diseases of women. Dr. Simpson has, however, collected a sufficient number of cases to prove that it should no longer be overlooked, and a paper by him forms the basis of the article in the volume before us.

Traumatic tetanus as proved by statistics, and in opposition to the former general belief, is much more frequent in the male than in the female. Dr. C. gives statistics, principally European we presume, which rates the proportion nearly 4 males to 1 female.

This ratio is, however, much higher than we find it in this country. The U. S. mortality statistics for 1850, give 694 deaths by tetanus for the year, of which 418 were males and 276 females, which reduces the comparative liability of the males to less than 2 to 1. We apprehend that few persons are aware that the mortality from tetanus in the United States, reaches so high a figure as 694 deaths in the year, as is given in the above returns. In this aggregate is included the number of 416 blacks. We may, perhaps, add to the value of these figures by specifying the proportion of the sexes in both races. Among the white population, the deaths by tetanus were, males 181; females 97. Colored, males 237; females 179. The season of the year appears to have but little influence upon its production. Figures never more plainly exhibited a fact, than the uniformity with which the disease is equally distributed throughout the year.

Tetanus may occur from injury of the *unimpregnated* uterus, although this is very rare.

Professor Simpson gives a case in which he removed a large cellular polypus "by slight traction" from the uterus, and on the ninth evening lock-jaw came on, and terminated fatally in about fifty-five hours.

"It may also occur *after abortion*, as was held by very ancient authorities; but it is not peculiar to first pregnancies, or to any period of pregnancy. Nor was there any regularity in the period which elapsed between the miscarriage and the sitting in of tetanus. In one it occurred a few days after; in another on the sixth day; in a third on the seventh; in a fourth on the eighth; in a fifth on the thirteenth day, and in a sixth a fortnight after the miscarriage. All the patients died; one in sixty hours; one in seventy hours; three on the third day; one on the fourth day; one on the seventh day; one on the eleventh day, and one on the thirteenth day."

There was nothing peculiar about the miscarriage in most of the cases; in some the ovum was not immediately thrown off; and in others there was so much hæmorrhage as to require the plug. But irritation from retention of the ovum, or the presence of the tampon is an every day occurrence without exciting tetanus.

"The symptoms of tetanus were in no respect unusual—commencing with a degree of stiffness about the jaws, and they shortly became rigid and the body retroflexed by tetanic spasms."

The lesions discoverable in the uterus after death, in the cases following abortion, shed no light upon the character of the injuries and their connection with the development of fatal disease.

Tetanus may also occur after *parturition*. Dr. Churchill speaks of the collection of 250 cases, following labor.

Our author says, "It is not more frequent after the first confinement than after subsequent ones; but as to the period of the attack, Dr. Simpson observes, that it seems to be governed 'by the same laws as regulate the occurrence of the disease after abortion, or after surgical operations and injuries. Under all these conditions the tetanic attack usually does not commence till about a week after the occurrence of the exciting obstetrical or surgical lesion. According to some statistics published by Romberg, in more than a half of all the instances of surgical tetanus—or in 112 out of 208 cases—collected by him, the attacks set in between the third and tenth days after the receipt of the injury, or the occurrence of the operation.' Of Dr. Simpson's cases, it is mentioned, that in one it occurred soon after delivery; in one on the second day; in one on the third; in one on the fourth; in four on the fifth; in one on the sixth; in one on the seventh; in two on the fourteenth; in one on the seventeenth day; in one after three or four weeks; and in one after seven weeks. In Dr. Woodhouse's case it occurred on the eleventh day. Of Mr. Waring's 232 cases, seven were attacked the first day; thirty-two the second; twenty-nine the third; twenty-three the fourth; twenty-two the fifth; thirty-two the sixth; fifteen the seventh; fourteen the eighth; fifteen the ninth; fourteen the tenth; two the eleventh; nine the twelfth; four the thirteenth; one the fourteenth; one the seventeenth; one the eighteenth. In Dr. Patterson's case it occurred on the fourteenth day."

There is nothing peculiar in the character of the tetanic symptoms, except that early in the attack it may be mistaken for a species of sore throat, and our attention diverted from the prompt treatment of a very severe affection. The disease seems more frequent in warm climates than in cold; Mr. Waring has published an account of the disease occurring in puerperal women at Bombay, from which it appears that in three years, ending Dec., 1852, no less than 232 women died from it, and the number appears increasing.

Cold, injuries, operations, and, perhaps, the presence of putrifying matter in the uterus, are assigned as the principal exciting causes. As to the pathological character of the disease, Dr. Simpson attributes it to the lesion of the internal surface of the uterus, which he considers analogous in its operation to the external wounds, producing tetanus, and the reason why it does

not more frequently cause it, may be from the uterus being almost entirely supplied with nerves from the sympathetic system.

Upon the subject of treatment, after detailing the course usually employed for the relief tetanus, the use of chloroform is recommended. If used, its action requires to be sustained for many hours, or oftener, perhaps, for many days. In illustration, a case is given where its beneficial effects were apparent; but the report loses great part of its value as it fails to state the actual termination, the reporter ending the recital by saying, "I now anticipate a recovery."

Paralysis occurring during Gestation and in Childbed, forms the second chapter of the important additions to the present volume.

Dr. Churchill states, that having been much interested in a case of paralysis after delivery, he was induced to enter into the inquiry of the occurrence of this disease, not merely after delivery, but during gestation, and to examine all the authorities within his reach for information relative to the same, but his search had not been very fruitful of results. In the principal obstetrical writers no mention is made of the disease.

Reference is made to all the authors, and reporters of cases in periodicals, which a patient search discovered, who speak of this complication of the puerperal state, which renders the chapter a very complete bibliographical notice of this form of palsy.

A communication by Dr. Simpson, made to the Edinburgh Obstetrical Society, is quoted, where the connection between the presence of albuminuria and the development of the puerperal convulsions and paralysis, is traced. The derangements of the nervous system assume a variety of forms, and may even be developed, without preceding convulsions. Some form of blood poison seems to be at the origin of these difficulties.

We quote the following paragraphs, in which Dr. Churchill sums up what is known upon the subject:

"Let us now see to what the information we have obtained from these different authorities amounts. Very briefly, we find:

"1. That hemiplegia, paraplegia, or partial paralysis, may occur previous to, during, or some time after labor.

"2. That by some authors, the paralysis, in paraplegia especially, is attributed to pressure upon the muscles or nerves, in prolonged labor; but this is also denied, as the same disease follows easy labor, or occurs after the lapse of some days.

"3. Paralysis may terminate convulsions or accompany them.

"4. Paralysis may be the consequence of organic disease, or of effusion into or upon the brain or spinal marrow.

"5. Paralysis may result from reflex action.

"6. The palsy may depend upon temporary causes, and among such causes albuminuria may be included.

"7. Hemiplegia may run on into apoplexy, or it may pass off in a few weeks, or sometimes more slowly. Paraplegia may leave a temporary or more permanent lameness; the local palsies (amaurosis, deafness, &c.) generally last but a moderate time.

"8. A nervous or hysterical paralysis, may occur occasionally in the unimpregnated state, or during pregnancy, but that it seldom continues after delivery."

The above summary of pathological points, is followed by the recitation of thirty-five cases, in which all the numerous forms of puerperal paralysis is described. We have hemiplegia, paraplegia, paralysis of arms, hands, and legs, deafness, facial paralysis, amaurosis, partial paralysis of side, etc., occurring during pregnancy, and during and after delivery, detailed in all their various phases. Of the thirty-five cases, twenty-three occurred during pregnancy; twelve either during or after labor. Of the thirty-five cases, four died.

In most of the cases, the attack was without warning, and without *apparent cause*. And it is a difficult matter to assign a cause. Our author enters into a careful examination of the various causes which have been assigned in the morbid states thus developed in the nervous system, but arrives at nothing definite. The most constant abnormal condition of the system noticeable, is the presence of albuminous urine. Albuminuria is a very general, although not constant accompaniment, of puerperal convulsions, whether paralysis follows or not the eclampsia. And albuminuria is present in these cases of paralysis, without any reference to their being preceded or not, by convulsions. And hence it follows, according to Dr. Lever, that as the albumen diminishes, the paralysis subsides. In view of all the circumstances attendant upon this consideration of the subject, Dr. Churchill concludes it is probable the kidneys play a more important part in these paralytic affections than has been suspected, and that the subject deserves more attention than it has received.

"Nor is this barren theory only," adds Dr. C., "but, if it be true, it has a direct bearing upon practice, inasmuch as our attention ought not to be confined to the secondary affection of the nervous system, in such cases, but must be directed to the relief of the renal malady, and to the restoration of

the kidneys to such a state of efficiency as may enable them to remove the morbid constituents of the blood; and for our encouragement, we have seen that a diminution of albumen in the urine is followed by mitigation and cure of the paralysis."

With this view, bloodletting general, or local as the system will bear; blisters, purgatives and mercury, are the remedies proposed, their use being modified according to the condition of the patient, and the circumstances of the attack. In most of the cases given, and to which we have already alluded, mercurials were given to the production of salivation, more or less complete.

Arterial Obstruction in Puerperal Women, forms the third chapter of additions to the present volume. It is a short and very concise account of this affection, in which the symptoms are principally given by the recitation of cases. The chapter is one which is so thoroughly condensed by its author, that its entire transference would alone enable us to give in this place any adequate idea of its contents.

Convulsions, follow undoubtedly, the most regularly in the order of consideration, after the diseases to which we have just made reference. In the volume before us it occupies the sixteenth chapter of the third book. Puerperal convulsions, Dr. Churchill divides into three varieties—the *hysteric*, the *epileptic*, and the *apoplectic*. He enters minutely into the diagnostic symptoms of these varieties, so much so that one would naturally conclude that there is but little difficulty in, at all times, specifically diagnosing and describing all the shades of differences which may present themselves at the bedside. We cannot divest ourselves of the belief, that the various diagnostic symptoms are more easily described upon paper, than they are made out in the sick chamber, notwithstanding all the acumen the practitioner may bring to bear upon the investigation of the case. The hysteric form may present but few difficulties, but after all, we are inclined to believe that a, or the *differential* diagnosis is oftener made out from the *result* of the case, than from discoverable differences in the symptoms apparent during the continuance of the attack.

Epileptic convulsions are said to be far more frequent than either of the other forms. Apoplectic convulsions are said, seldom or never to occur, except toward the termination or after the conclusion of labor.

The statistics are presented in the volume before us, of 190,313 cases of labor, in which convulsions occurred 273 times, or 1 case in about 693 $\frac{1}{2}$.

The mortality is large, though probably less now than formerly. Thus, out of 254 cases, given in the volume, 57 mothers were lost, or about 1 in 4½. Of 15 cases treated by Dr. Condie, 3 of the patients were lost. We must admit, that this is a far more favorable rate of mortality than we had been led to suppose.

We shall make no attempt at a recitation of the numerous *causes* which have been assigned and are noticed, for the development of puerperal convulsions; these, of course, must be more or less hypothetical, and be the result of theoretical reasoning, rather than the conclusions drawn from positive demonstration. We shall stop only to notice, amid the numerous disturbing causes which have been assigned, the prominence which is given to the dependence of convulsions upon an albuminous condition of the urine. The authorities quoted go to prove, that in a large proportion of cases of convulsions there is albuminuria, with or without anasarca. Still, albuminuria may be present without convulsions, and convulsions may supervene without albuminuria.

"For example, Dr. Blot found albumen in the urine of 41 pregnant women out of 205, and chiefly in primiparæ; and Dr. Litzmann examined the urine of 131 females, 79 during pregnancy, 80 during labor, and 80 after delivery; albumen was present in 37, and absent in 95; of the 37, 26 were primiparæ. What is the exact relation between the two, it is difficult to say precisely. I believe, with Dr. Simpson, that they both stand in the relation of effects of another cause, viz: 'a pathological state of the blood, to the occurrence of which pregnancy some way disposes.'"

"More recent researches have thrown a good deal of light upon the occurrence of this renal affection. De Villiers and Regnault observed it as early as the sixth month; Litzmann not till the eighth. The most characteristic symptom is dropsy of the hands, arms, and face, but dropsy does not necessarily coëxist."

To congestion of the kidney produced by the mechanical pressure of that organ by the enlarged uterus, has the presence of albuminuria been attributed, rather than to the consequence of granular degeneration. According to most observers, the albumen very shortly disappears, often as early as forty-eight hours after delivery.

Pregnant women are more especially liable to puerperal convulsions during the latter two months of pregnancy; this is not, however, invariable, for they may appear at an earlier period, and at irregular intervals. The risk of an attack is increased by the approach of the date of the termination of

gestation, the extreme and increasing distension of the uterus, with its consequent increased irritability furnish the apparent cause.

The *treatment* of convulsions, under the head of the epileptic form, is upon the whole judicious, and calmly inculcated. He divides the cases into two classes, sthenic and asthenic, and modifies the character of his treatment by the condition of his patients. To the pale, exsanguined and weak he would prescribe the loss of blood with the exercise of great caution, and place his main reliance upon counter-irritation of the head and neck, the application of cold in moderation, and the use of purgatives, and, he "believes, upon anæsthetics." In the sthenic form, with the head hot, face flushed, and pulse full, firm and frequent, he would practice venesection freely and early, and use in connection the other means before indicated.

He speaks in terms of approbation of the use of anæsthetics, and quotes with terms of commendation, authorities and cases where relief has been afforded by producing insensibility by these means.

Apoplectic convulsions are treated separately, and the causes, symptoms, pathology, diagnosis, and treatment are all briefly considered. The distinctive characters which the author would inculcate as present in this peculiar form, are sufficiently apparent in the descriptive name attached to it. It is said, seldom or never to occur except toward the termination, or after the conclusion of labor, and as being evidently caused by the stress upon the cerebral vessels occurring during labor.

This form, as might be supposed, is most certainly fatal, but there occurs occasionally; cases answering, the author presumes, to the congestive apoplexy of Abercrombie and Lallemand, where our timely aid is successful, and the patient recovers sense and motion; and if proper care be taken, is speedily well.

An editorial note included in brackets, of a few lines less than a page, concludes the chapter. We must confess that we were surprised to find, that the note thus appearing as Dr. Condie's, has been transferred nearly bodily from one of Dr. Huston's notes to the edition edited by himself, without proper credit to the original annotator. We have before us a copy edited by Dr. R. M. Huston, and published in 1847, in which Dr. H. incorporates a note in that portion of the text devoted to the consideration of the epileptic form of convulsions. Dr. Condie, in the edition under review, transfers this note to the *close of the chapter* on convulsions, and following immediately after the consideration of the apoplectic form. The first paragraph he credits to Dr. Huston, the balance of the note he appropriates as his own. This, with two or three slight and immaterial alterations, is a *verbatim* copy

of Dr. Huston's note! which fact any person can verify by making the comparison.

This may be a cheap method of *editing* a book, but we can but consider it a means altogether beneath the dignity of a man with Dr. C.'s reputation. The more so as the note adds not one syllable to the value of the text. Dr. Condie cautions against the excessive use of bloodletting, and speaks favorably of the use of cold applications, purgatives, &c.;—so does Dr. Churchill, —and he does still more, he speaks favorably of and recommends anæsthetics. Dr. Condie preserves a profound silence upon the subject; you would not know from the teachings of Dr. Condie that such remedies had ever been used.

Puerperal Fever is treated at length. The author gives some sixty pages and the editor adds some ten or twelve more.

Dr. Churchill omits the detailed historical accounts of the prevalence of the disease at distinct periods, given in the earlier editions, and contents himself with simply presenting a chronological list of the epidemics, and the pathological characteristics when ascertained. Numerous statistics are also presented in other tabular forms.

The subject is treated at too great length for us to give, in our limited space, anything more than a very meagre outline of its contents.

He acknowledges the general fact that puerperal fever is connected oftentimes with the presence of local disease, and repeats as his conviction that there are not many cases of fever without some lesion of the organs employed in parturition, or of the neighboring tissues; but he now abandons the position taken in the former editions, in conformity with the opinion held by Dr. Robert Lee, that there is no specific, essential, or idiopathic fever, which attacks puerperal women, independently of any local affection in the uterine organs. Dr. Lee taught, "that as the constitutional symptoms appear to derive their origin from a local cause, it would certainly be more philosophical and more consistent with the principles of nosological arrangement to banish entirely from medical nomenclature the terms puerperal or childbed fever, and substitute that of uterine inflammation, or inflammation of the uterus and its appendages, in puerperal women."

Dr. Churchill now says, "I am bound to state honestly and frankly that more extended experience has led me to doubt the accuracy of these views, and to believe that malignant puerperal fever is something more than a local affection, and that the constitutional disease is often rather primary than

secondary. At the same time I have no doubt that Dr. Lee's views are applicable to many cases."

What is the essential nature of malignant epidemic, puerperal fever, is a question, which he does not find of easy solution. He gives at length the different views held at different times by a multitude of writers.

Dr. Churchill sums up this branch of his subject as follows:

"If we regard the peculiar characteristics of different epidemics, we find them extremely varied. In one, the lochia are suppressed; in another, they are profuse; and in a third, unaltered. Diarrhœa is common in one epidemic, constipation in another; typhoid symptoms in one, inflammatory in another. And as to the effects of remedies, we find as great a diversity: one high authority recommends saline purgatives, which fail in the hands of other practitioners; another loses his patients until he bleeds largely at the commencement, whilst others lose all who are so bled. Calomel is the universal remedy in one epidemic, opium in another, purgatives in a third, inunctions in a fourth, turpentine in a fifth, &c.

"Now from these variations, the inference is obvious, that the *type of the disease varies in different epidemics, and that the treatment must necessarily differ*. But I think we may go a step farther; and if any one will carefully compare a case of simple inflammation of the womb or peritoneum in child-bed, with a case of malignant puerperal fever, their symptoms, general and local characteristics, course, and the effects of remedies, they will be obliged to come to the conclusion that, although the latter may exhibit local disease, it is not exclusively nor primarily a local affection."

From what observation we have been able to make upon epidemics in any form, we are inclined to believe, that in the above paragraphs is to be found the key which is to afford a solution to the inconsistencies which are apparent in medical opinions and practice when applied to epidemic diseases from year to year, or through a succession of years. A stereotyped form of practice is not an intelligent exercise of the attainments of the physician, nor all that is to be learned from the teachings derived from the observation and study of the phenomena of disease.

The subject of the *contagious character* of puerperal fever is discussed at considerable length, and the arguments and authorities *pro* and *con* are cited, and Dr. C. comes to the conclusion, "after a close and careful examination of the history of epidemics, of cases recorded, and of the opinions of men of the greatest experience, that the weight of evidence is in favor of puerperal fever being infectious and contagious." He says, however, "Of the simple cases of peritonitis or phlebitis after labor, occurring sporadically,

he does not know that any one considers them contagious." He dwells somewhat at length upon the apparent connection of erysipelas and puerperal fever, where these diseases assume an epidemic form, or where erysipelas appears to be the precursor of the latter fatal affection.

Dr. Churchill inculcates great caution, as a matter of necessity to be observed by those, who by any possibility may be the means of propagating this disease. It is most certainly a thought which can add nothing to the happiness of the physician to believe, that when called to prescribe to the sufferings of the distressed, that instead of being the assuager of pain, and the minister of health, his presence is only to certainly sow the seeds of inevitable death.

At this period, Dr. Churchill proceeds to discuss the different forms of disease. He first gives the arrangements or classifications adopted by others, and then presents the arrangement which he proposes to employ in the consideration of the subject.

We have no space or time to follow him through all these differences of classification, as he proceeds to describe the symptoms, diagnosis, prognosis and treatment of each separate form, or variety.

Under the head of *treatment*, we can do but little more than to intimate, that he predicates it "upon general principles," (as we have known many a puzzled student unable to descend to particularities, answer at the "quiz" in the lecture room,) which govern the treatment of local inflammatory disease. Bloodletting, general or local, singly or combined; calomel and opium, &c., are indicated and prescribed. One cannot, however, avoid noticing the freedom from dogmatism which pervades the pages upon the subject of treatment, and the cautions which are inculcated against attempting to treat these various forms of disease by the adoption of one invariable, and inflexible rule. Attention to the peculiar type of the disease as it presents itself to the eyes of the practitioner, and makes its demand upon him at the bedside of the patient, is strongly urged upon the consideration of the physician, and he would indeed be deaf to every call of duty who heeded not the voice of so rational a teacher. Upon the employment of bloodletting, the recommendations are judicious, and no one is taught to sacrifice his patient, at the mere suggestion of the presence of a disease, although it comes in so fatal a form.

We notice in one or two places, he speaks of the use of opium in *large doses*,—*a grain* administered every hour, and with favor. What sort of a dose would Dr. Churchill call *a grain of morphine* given every one or two hours, in the treatment of this disease?

In the additional pages which Dr. Condie has added to this chapter, he endorses generally the positions taken by Dr. Churchill. Indeed he appears to insist more strongly than the latter gentleman, upon the idiopathic character of this form of fever, and can find no other means of explaining the difficulties which are apparent upon any study of the phenomena of the disease, than by a recognition of puerperal fever as a true idiopathic fever.

Dr. Condie says that "Dr. Meigs in his recent treatise on childbed fever, repudiates the existence of an idiopathic puerperal fever, inasmuch as the term fever excites 'a certain material idea of zymosis in the mind of the hearer of it;' but he, nevertheless, substantially admits all that would be necessary to include puerperal fever in the list of zymotic diseases."

Calling into question the position assumed by Dr. Meigs, that the atmospheric causes of this disease do "not poison men, nor boys, or girls, or non-pregnant women, but only the pregnant or lying-in portions of society," Dr. Condie proceeds to trace the parallelism which has so apparently existed between the outbreaks and developments of erysipelas and puerperal fever, which he illustrates by reference to the numerous epidemics which have been rife within the United States within the last few years. While the mother, exhausted and helpless from the pangs of labor, was marked as a special victim, male as well as female, and young as well as aged fell before the disease. Inflammation of the peritoneum in men and nonparturient females, as well as the deadly epidemic erysipelas kept close company with puerperal fever as it enveloped in the shadows of the grave the lying-in-chamber. There was no room to doubt the intimate connection between the two forms of disease.

We notice that neither the author or editor makes any reference to the treatment of puerperal fever by large doses of opiates frequently administered,—we do not mean grain doses of opium, but grain doses of *morphine* administered every one or two hours, assisted by tonics and concentrated nutriment. A number of cases within a few years past, have found their way into the medical periodical press, and they are sufficiently full of promise to challenge the attention of every practitioner.

Congestion, Inflammation, Erosion and Ulceration of the Cervix Uteri, are treated of in a chapter of moderate length, and which in our irregular course of exploration of the contents of the volume, we propose next to examine. He purposely, as he declares, avoids entering into the controversy which has been carried on with so much virulence upon this subject, and refers to the writings of the acknowledged champions of the diverse sides.

But he believes most decidedly in the presence of local disease in connection with uterine derangements, and follows Bennett and Whitehead as "the men of his counsel." He is, however, moderate in tone, and avoiding all discussion, describes symptoms and appearances only, not seeming to doubt in the least but what these lesions exist and can be found for the seeking after; and has nothing to say about "dishonesty" of purpose and practice, upon the part of those who may differ with him, as was the free epithets of a recent writer, whose work we had occasion to refer to not long since.

The symptoms accompanying the several conditions of the os uteri placed descriptively at the head of the chapter are each considered in their order. We can, however, but consider this more as an attempt toward scientific accuracy in treating of his subject, than a belief of its practical value as a means of distinctive diagnosis. For we have no idea that anything else than an examination aided by the speculum, will enable one to decide upon the actual presence of disease and its specific character, although the experienced practitioner in these diseases may shrewdly suspect and predict with great certainty from the symptoms, the great cause of the whole train of ills which has "legion" for its name, and renders woman's life oftentimes a burthen.

Nor do we understand that very much difference in the mode of treatment is inculcated in these several forms; or a very dissimilar result obtained in either case.

But we are unable to pursue the analysis of the volume any further at this time. We think we have already presented enough of its contents to disclose the practical character of the work, and its value to the practitioner as a ready means of reference upon all points presented to his consideration while treating the diseases peculiar to the female.

Dr. Condie has interspersed a number of notes throughout the volume, and they seem to be principally added to those articles which we have not made the subjects of especial notice. Dr. Condie, in these notes, seems to have supplied a number of omissions in the text, necessary to render the subjects complete; and what we notice with especial favor is, his notes have particular reference to the labors and contributions of American medical men in the departments of medicine and surgery.

The labors of both author and editor seem to have been devoted to bringing the work up fully to the times, and we feel that we can endorse the prefatorial note of Dr. Condie, who regards "it a complete and faithful exponent of the present state of medical opinion and experience, in reference

to the pathology and therapeutics of the entire range of diseases to which the female sex is liable, including those of pregnancy and childbed."

For sale by PHINNEY & Co.

N.

ART. VIII.— *Report of Mortality in Buffalo for the month of June, 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accidental,.....	2	1	1
" Fracture of the Leg,.....	1	1	
" Asphyxia Immersorum,.....	5	4	1
Apoplexia,.....	1	1	
Bronchitis,.....	2		2
Croup,.....	2	1	1
Cholera Infantum,.....	6	2	4
Chloroform, Effects of Inhalation,.....	1		1
Diarrhoea,.....	1		1
Debilitas Senilis,.....	2	1	1
Dentitio,.....	1	1	
Eclampsia,.....	13	5	8
Febris Typhoid,.....	4	3	1
" Scarlatina et sequela,.....	23	9	13
" Ignotus,.....	1	1	
Gastro Enteritis,.....	1	1	
Hydrops,.....	5	1	4
" Cephalic,.....	2		2
" Thoracic,.....	1	1	
Hepatitis,.....	1	1	
Hyperæmia Cerebralis,.....	2	1	1
" Intestinalis,.....	1	1	
Intemperance,.....	4	2	2
Ignotus,.....	23	14	8
Morbus Cordis,.....	5	3	2
" Coxalgium,.....	1	1	
Meningitis,.....	2	2	
Paralysis,.....	1	1	
Pertussis,.....	1	1	
Pneumonitis,.....	3	2	1
Rheumatism,.....	2	2	
Still-born,.....	8	7	1
Suicide,.....	1		1
Tuberculosis Pulmonalis,.....	12	8	4
Ulceratio Intestinalis,.....	1	1	
Total,.....	140		

SEXES.

Males, ...	80
Females, ...	60
Sex not given, ...	0
Total, ...	140

AGES.

Still-born, ...	8	Between 20 years and 30 years, ...	11
1 day, ...	4	" 30 " " 40 "	11
1 day and 30 days, ...	7	" 40 " " 50 "	7
Between 1 month and 6 months, ...	13	" 50 " " 60 "	3
" 6 months and 12 "	15	" 60 " " 70 "	7
" 1 year " 3 years, ...	25	" 70 " " 80 "	1
" 3 " " 5 "	9	" 80 " " 90 "	0
" 5 " " 10 "	5	" 90 " " 100 "	0
" 10 " " 20 "	12	" 100 " "	0
Total number under 10 years, ...	86	Total number over 10 years, ...	52
Ages not given, ...	2	Total, ...	140

NATIVITIES.

American, (white,)	86	Norwegian, ...	2
" (colored,)	1	Welsh, ...	0
German, ...	19	French, ...	0
Irish, ...	18	Scotch, ...	0
English, ...	5	Holland, ...	0
Canadian, ...	0	Country not given, ...	9
Total, ...	140		

Facial and Dental Neuralgias.—Doctor Michel Andre recommends the following mixture for prompt relief: Extracts of opium, of belladonna, and of stramonium each 1 part; laurel water 12 parts. A few drops are placed in the meatus auditorius, and cotton is placed in the passage, taking the precaution to hold the head on the opposite side for a few moments, that the fluid may pass freely into the canal.—*Revue Therapeutique from Philadelphia Med. & Surg. Jour.*

Ointment for Zona, by Dr. Dutkil. Neapolitan ointment 30 grammes; ext. belladonna 4 grammes. Mix. The cure will be obtained in forty-eight hours.—*Id.* (We have found the tincture of iodine very successful in one very bad case of the above disease.)

EDITORIAL DEPARTMENT.

Powers of County Medical Societies.—With feelings of unusual pain and regret, we publish in this number the decision of Judge Marvin, of the Supreme Court, in the matter of the application of John D. Hill, to be restored to membership in the Erie County Medical Society.

We say unusual pain and regret, not that Dr. Hill should have gained by force of law a position which professional sentiment withheld from him, for once back in the society Dr. Hill is no longer the important individual which the cry of persecution and his prominent position as the contestant of the powers of a time-honored society have hitherto made him. He will naturally find his own level, and what that may be it is not for us to predict. The mere act of restoration is trivial and unimportant, and we, for one, care little about it.

But there is a principle involved here upon which, as we verily believe, hangs the life of this and every other county organization in the State, and it is a source of pain and regret that the hand of the judiciary should have stricken away the last vestige of all that was desirable in the chartered rights of the medical profession of the Empire State.

We have no great respect for that wondrous pile of circumlocution which is called law. It is a science founded on only human greed, and avarice, and trickery; on the assumption that all men are villains, so that when a question of honor comes up before it, honesty and straightforward purpose go to the wall before some merciless theory, simply because the law does not suppose the existence of honesty and straightforward purpose. Thus it was in this case. Judge Marvin recognizes the Erie County Medical Society as a corporation, and as a corporation he is ready to honor it. In his eyes a corporation has only one purpose, and that is to make money. The society in its tariff was trying to make money out of the public authorities, and Dr

Hill had a common-law right to make money in his own way which the society could not infringe. Consequently the rights of the corporation yield to those of the individual.

Now we had thought—we presume it would never occur to a judicial mind—that county societies were designed, and organized, and maintained, for the purpose of making men more honest than the law allows; of enforcing a higher code of morality and ethics than the law demands from the simple citizen. But according to Judge Marvin we have only the power to grant favors—none to exact conditions.

Those who read his argument carefully will discover something which may astonish them. The franchise of the society is so valuable, the respectability conferred by membership is so great, that it is beyond price; not to be paid for in personal sacrifice to the general good, the yielding of personal rights to the will of the majority. In fact, unless we read Judge Marvin wrong, we have no right to expel for anything less than a crime known to the law.

A society thus powerless is worthless. The only thing gained by our chartered organization was the privilege of choosing our company. The law—as we vainly thought—permitted us to set up a standard of scholarship and gentlemanly character, and draw a line of demarcation between those who practice medicine as a holy science and art, sacred and elevating in its tendencies, and that vile herd of pretenders to healing who work for gain only.

But the bench has decided otherwise. It has said that if we dare to check or thwart the money-getting spirit which now reigns supreme; dare to assert that medical services are not to be put up to the highest bidder, like cattle in the market, we shall be taught that we are powerless. Mammon is God! “The law declares it and the court so rules!”

We have one power left—yes, two. First, if a member steals or commits a rape—oh! what a compliment to ourselves is the supposition!—and we can prove it with all legal technicalities, we may—not expel him ourselves—but ask a county judge to do it for us! And, secondly, we can refuse admission to any one whom we please—thanks to Gov. Marcy, who, though dead, yet speaketh on that point. But we have no power of weeding our ranks. The smooth-faced young man comes to us with the wax still soft on the seal of his diploma, fair-spoken as to his intentions, and we admit him. Once in, there he is! He may reject all the rules of the code of ethics, cast from him every obligation which should bind the man of honor, and yet there he is, a member, and only some solemn county judge

can make him anything else. He derives all the benefits of association on terms of open and declared equality with the most honored members of the profession, and requites those benefits by dragging them in the mire of his disgrace, while they have no power to cast him off. He may choose to practise open quackery, sneer at the time-honored profession which has named him "Doctor," and brazenly advertise to the town as a mountebank, a peddler of panaceas or of the vile concoctions of Thomsonianism. But we have no power to interfere, Judge Marvin has decided that the individual has an indefeasible right to get a living, honestly if he can, but at all events to get it.

Be it remembered that we are not impeaching the judicial wisdom of him who rendered this decision. Lawyers tell us that it is good law, and we believe it. We are only looking at the absurd position in which it places us poor men of the so-called regular profession, not in this case alone, for that is of small moment, but in all future time. We are coming down like law-loving citizens, to the question of dollars and cents, and inquiring what in the name of all that is decent is a County Society good for?

It is a convenient time now to stop and foot up our legal position and franchises—we like that last word, it is such a consolidated \$10,000,000 capital sort of expression, implying a permanent investment somewhere.

There is a solemn statute in the books which Judge Marvin tells us all about, which once gave us a right to say who should and who should not be physicians, making the irregulars incompetent to collect their bills, and punishing them for manslaughter when their patients died; other rights it gave us, but as the goodly doctrine that one man is as good as another, and frequently a little better, gained stronger hold in the public mind; as our legislature became filled with men to whom this doctrine was particularly consoling, inasmuch as nothing short of legal enactment could make them as good as other men; one by one, our franchises—that magnanimous word—were stripped from us, until now the charlatan is the legal equal of the man of learning and position. The doors of a frantic liberalism were opened (and we are told that even the law got a taste of the same benefit at last, until even it is falling into contempt) antiquity, a glorious past and a present resplendent with learning, philanthropy and heroism in the face of new and strange pestilences, all the achievements of modern medicine were cast down and condemned to degradation as too slow—ah, too holy and too pure!—for this age of rapid progress and latter-day illumination. All this has been done through the gathered wisdom of Senate and Assembly by legislative enactment, and now the judiciary comes in to strip away the last vestige of

our power, the only lingering remains of class distinction earned by how much patient heroism, by how many lives like those of the forty dead physicians of Norfolk, only the Last Day may tell.

The game is up. This decision has made the plaintiff a living member of a dead body, in that it strikes a deadly blow at the existence not only of this society, but of all other organizations in the state. We do not advocate the abandonment of these societies; that is unnecessary, they will die of this decision without further action. They are only useless excrescences on the healthy body of our profession. It—the profession—is sound and strong, all the law and all the lawyers cannot check its growth and usefulness. But voluntary association must take the place of chartered rights, and, placing ourselves in an equal field, we must fight out the battle with selfishness, pretension, and quackery on the sole ground of our own deservings.

Embalment.—A writer in the New Orleans Medical Journal, Dr. W. T. Cox, gives an interesting article on the subject of embalming the dead. We are in error when we speak of this as one of the lost arts, or as one laid aside from a change in the customs of nations. The pomp and ceremony of modern burial often require the preservation of the remains of dead humanity, and in many of the nations of Europe the process is as common as it was of old on the banks of the sacred Nile; and much more perfect. Egyptian embalment was but a process of desiccation. The air of the valley of the Nile so rapidly hastens decomposition that, without some artificial process, the bodies of the departed could scarcely be preserved for a few hours. As soon as the breath had left the body it was borne to the sand ridges of the desert which skirts the valley, and there deposited in the nitrous sands. The scorching wind of Edom blew over it, its moisture rapidly disappeared, and it was soon brought down again to some temple of Isis, to be dipped in bitumen, and rolled in the linen bandages which remain to this day. “Forty days,” says Holy Writ, speaking of the mourning of Joseph for his father Jacob, “And forty days were fulfilled for him; for so are fulfilled the days of those which are embalmed.”

But the days of Egyptian greatness, and with them the reverence for the dead, are gone. Other and less revolting means of preservation are resorted to by the moderns. Among them the method of M. Gunnal, of which so much was said a few years since, is still prominent. It consists of an injec-

tion of a solution of alum and common salt, although it is charged that M. G. did not rely upon this alone, but added arsenite of soda largely to his preparation. Corrosive sublimate, or corrosive sublimate and creosote, have for a long time been successfully used. For the preservation of dead bodies for dissection, the medical colleges of Philadelphia rely mostly on chloride of zinc in solution, but it, like all other mineral injections, has many and important objections. In all ordinary cases, our personal experience teaches us that where subjects are to be preserved in the wet state, common salt is an adequate antiseptic. We have given the most thorough trial to this, by injecting, first, with a solution of nitrate of potassa; and then packing the subject in a brine, not so strong as to deposit any free salt. But a more usual and convenient method, and one by which a subject may be kept fit for dissection for two or three years, and for aught we know much longer, is to inject the femoral artery with alcohol containing a little creosote and corrosive sublimate, and then pack in sawdust, saturated with alcohol. In a large tank provided for this purpose, we have known six or eight subjects to lie for months in perfect preservation. One thing is remarkable, and that is that there are no means by which drowned subjects can be saved from rapid decomposition.

But that which is now most desirable for the art of embalming, is some process by which the body may be preserved in a dry state for the purposes of prolonged periods before interment; or permanently, in order that the decomposition of bodies in city cemeteries may not poison the air around. The use of poisonous salts is objectionable, both for reasons of health and because they would interfere in subsequent judicial investigations in cases of poisoning. The patent metallic burial case would aid very much in any such process, and we are inclined to believe that a body injected with creosote and alcohol, and subsequently placed in a metallic case, would last indefinitely. But this method is too expensive for general use, and it yet remains for those interested in the prosecution of this subject, to discover some means, by which the process of decay may be interrupted, or modified, so that the decomposition of a crowded church-yard may not sow death among the population around it.

University of Buffalo—Medical Department.—With this number appears the annual advertisement of the Buffalo Medical College. A glance at its list of teachers will show no change in its organization, except in the post of Demonstrator of Anatomy. The present arrangement of the curriculum of study, and the division of labor among the different members of the faculty, has proved profitable to the student and pleasant for the teacher. So long as our present imperfect national system of education is continued, we regard this organization of the various chairs as that best suited to the wants of the student.

Of the men who make up this faculty, we could say much; but they are our colleagues and our personal friends, and we must withhold the praise we would otherwise gladly utter. Fortunately, they are men whose names speak for themselves.

Of the other advantages of the school we speak without fear of being misunderstood. We state that which we know, when we say that it affords the best clinical advantages of any school in the United States. Its clinics are located so near to the college edifice, that no student can urge the excuse of inconvenience for absenting himself from them, while, for the large variety of disease presented, we have only to appeal to the surgical and medical clinical reports published from month to month in our pages. Moreover, having good advantages, it uses and profits by them.

The past term witnessed a satisfactory increase in the number of students. Present circumstances indicate a still further improvement in this respect; and those interested in the school feel strong in the belief that, with all the strong competition under which it must labor, it will sustain the hopes of its self-sacrificing founders. To this end are pledged the earnest efforts of the faculty.

Hereditary Talent.—The July number of the American Journal of Medical Sciences contains the Inaugural Thesis of Dr. Austin Flint, Jr., the son of the distinguished former editor of this journal. It was published by order of the faculty of the Jefferson Medical College, in which school Dr. Flint, Jr., graduated. Its subject is the "Phenomena of the Capillary Circulation," and exhibits the same devotion to *personal* research and inquiry, which characterize the father of the author. Dr. Flint, Jr., has commenced practice in this city, and we hope ere long to witness some confusion of names,

which will render it difficult to tell whether the older or younger Flint is intended, when some good thing in medicine is noticed. However, from the facility with which the Junior whipped off an arm, the other morning, in our presence, we are inclined to think that his laurels may lie in the field of surgery; leaving to the Senior (not yet old enough to be "venerable,") his old province of practical medicine.

Female Doctors.—The Virginia Medical and Surgical Journal says:—"The Massachusetts Legislature has farther endowed their Female Medical College, despite the Governor's veto. It is said that the coarseness and vulgarity of the creatures licensed by this institution is only equalled by their ignorance."

To which the New Orleans Medical News adds—after a fling at the North, which had been better omitted; for the bitterness of sectionalism has no excuse in a scientific journal.

"But, speaking of female doctors, we were struck with an observation recently made by a lady. She said that a friend of hers had been attended lately by some female doctors in New York city, and that she was congratulating herself on having escaped from their clutches. She said that during their attendance, her feelings were indescribable; she was deprived of the valuable and courteous attention of a *gentleman*, and while she felt that she was the victim of ignorance, she saw clearly that her attendant had not the slightest claim to the title of *lady*. So much vulgar talk and street gossip was never dreamed of by a genteel physician in a life-time as she heard in one short illness. And such must female doctors ever be."

Very true. The real lady is as much out of place in the practice of medicine as in a regiment of dragoons; and once begun in the rivalries of practice, with all the opportunities for scandal which a feminine taste would develop, would soon be lost in the intriguing gossip. Monthly nurses are bad enough.

Medical Spiritualism.—In a late number of the Boston Medical and Surgical Journal, there is a very interesting paper by Dr. Walter Channing, on Medical Spiritualism, in which the writer records a notable instance of the attainments of "medical mediums," one of whose exhibitions he attended.

The medical medium had in consultation three distinguished doctors whom he had called from the spirit sphere. A few questions put to the medium as to what he saw in the organism of the patient, effectually exposed his utter ignorance of anatomy, and the little aid the spirits afforded him in making up the deficiency. After some further conversation, the medium was requested to ask Dr. —, one of the medical ghosts in consultation, what he thought of the "hour-glass contraction"—a very dangerous condition sometimes induced after child-birth—but not, by its name, suggesting to an unprofessional person any idea of its real character. The medium pondered some time upon the question, in order, apparently, to make sure of the departed doctor's present opinion, and then said: "Dr. — thinks hour-glass contractions a very good thing, and should certainly recommend it."

Davis' Theory of the Circulation is almost as good as Mrs. Willard's. For the benefit of the ignorant among our readers, we give the essence of it.

"Life is a substance, although, not unlike matter, it obeys a *higher law* than gravitation. * * * The heart throws the blood to the finest ramifications of the vascular system, and magnetically calls it back again. * * * This organ, unlike a *force pump*, operates upon positives and negatives, by alternate contractions and expansions. * * * The visible heart performs this function because there is a corresponding spiritual heart within it," &c., &c.

Clear as mud. A chimera ruminating in a vacuum devours second intentions, we have heard, but how he does it is just as plain as Davis' theory of the circulation.

Hard Times.—Have our debtors forgotten us? We sent out bills to the amount of \$2500, with the May number, but have not received enough to pay the running expenses since. This is rather hard upon a poor man. Perhaps we can hold out faithful to the end, living on air, but should any one see our obituary they may rest assured we died of starvation. Oh, for double our present number of advance paying subscribers. They are men after our own heart.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

SEPTEMBER, 1857.

NO. 4.

ORIGINAL COMMUNICATIONS.

ART. I.—Meningo-Cerebritis. *Death, Necropsy, and Microscopic Inspection of Brain.* Subject, a girl *æt.* 6 years, nervous temperament, hair and complexion fair, blue eyes, moderate cerebral development, precocious. Practice of Dr. WILCOX. Reported by BENJ. HEETON LEMON, M. D., Buffalo.

June 30th. Saw Carrie M——, Clinton street. The mother says her child has lately lost her appetite and been feverish and costive. Yesterday forenoon began vomiting; had high fever; headache; thirst. To-day has vomiting, stomach rejects everything; tongue furred; bowels constipated; rapid and quick pulse; headache; thirst; general exaltation.

July 1st. Headache, vomiting, &c., had ceased, and she rested comparatively well last night; learned that bleeding at the nose occurred the day previous to the first visit; there is now a sero-sanguinolent exudation from, and she is inclined to pick at, and thrust her fingers into it; eyes have a peculiar glistening appearance, pupils natural; no fever, in slight perspiration.

July 2d. Yesterday evening the headache and fever returned with intense severity; she refers the pain to the forehead. This morning there is no pain in the head, and but little heat of surface; head is giddy; speaks quickly; seems inclined to get out of bed; thoughts confused; fretful most

of the time, but will laugh or cry without any apparent reason; sighs frequently. Exacerbation of the symptoms occurs periodically every evening, the paroxysms lasting about six hours.

July 3d. Dr. Rochester in consultation.

The symptoms recurred yesterday evening at the usual time, but with less severity than previously; fever and headache remain. Strabismus first noticed by the mother during the night; this morning it is still present in slight degree; head is giddy; singing in the ears; labored and sighing respiration.

4th. Slight improvement; squinting and the other symptoms present, though in less degree than yesterday. The periodical exacerbation occurred again last evening of the usual duration, but no fever, the bowels having been thoroughly evacuated.

Called at 8, P. M., but did not arrive until 3 o'clock in the morning. The noise and excitement of the anniversary had aggravated the symptoms; she had been delirious during the night, but is now in a partially comatose state; would only collect her faculties and answer after considerable time; could slowly protrude her tongue after some length of time and with great apparent effort; when it was out would forget to withdraw it unless reminded, and then very slowly; increased squinting.

5th. Deeper coma; pupils dilated; partial loss of vision; grinding of the teeth; oscillation of eyeballs; muttering.

7, P. M. Coma more profound; entire loss of vision; cannot be roused; cannot put out her tongue; deglutition difficult, whatever is given having to be forced to the posterior pharynx.

6th. In about the same state, with the addition of retention of urine; this was relieved, but paralysis of the bladder succeeded, and the urine subsequently dribbled away involuntarily.

7th. Profound coma; stertorous respiration; convulsions; collapse, and death on the evening of the 8th. Duration of the illness being about ten days.

Autops. Cadav., about forty hours after death. Present, Doctors White, Flint, Rochester, Wilcox, Austin Flint, Jr., and Mr. Harvey.

Incision through integument over vertex to each ear; reflected flaps; applied saw, cutting through outer table and diploe; cracked inner table with chisel and hammer. (By this method the inconveniences of either saw and hammer, and chisel singly, is avoided, there being no danger of injuring the

membranes or brain, with greater facility of retaining the calvarium in its place when reëplied.)

The skull cap being removed the dura mater was found healthy, not more adherent to the bones than natural to the age. Divided at the sides, drawn to the top of brain, brought into view subjacent membranes.

The sac of arachnoid was moist but contained no fluid. Cerebro-spinal fluid in considerable quantity lying under it, in the sulci of convolutions; pia mater highly vascular, and the tissues much engorged with blood. The anterior attachments of the membranes being divided they were drawn backward altogether. The pia mater and arachnoid adhered in a small patch at the anterior superior aspect of the anterior lobe of the right hemisphere, and at the posterior part of posterior lobe of the left hemisphere, there was a patch of quite firm adhesion as large as a quarter of a dollar.

The anterior lobes were then carefully raised, and the several pairs of nerves cut as they were brought into view, finally, the spinal cord, as far down as possible, all of the medulla oblongata being brought away. The brain was then laid on a plate, base upward, those portions of the membranes covering the base were not brought away with it.

The left ventricle was much distended with fluid. The right had none. The quantity of fluid, including that of the ventricle and the cerebro-spinal, was, at a rough estimate, about $2\frac{1}{2}$ ounces.

The region from the optic commissure posteriorly to the pons varolii, and, indeed, all the surface known as the "locus quadri-lateralis, was covered over with exudations of plastic material, the arachnoid corresponding with this surface was thickened and opaque.

The 5th, 3d, and 4th ventricles were not examined with reference to contained fluid. The whole brain was softened, and easily removed with handle of scalpel. No peculiar appearances were observed either in the cineritious or white substances.

The whole was softened equally alike, as tested by Dr. Flint, by slicing and pouring on water.

The examination of the brain and membranes being concluded, the thorax was opened and the lungs, heart, and spleen inspected. Nothing noteworthy observed, but a portion of the apex of the left lung and a piece of the spleen were saved and added to the specimens already preserved from the base of the brain, (these being from the regions already described as the situations of the exudations and the opaque arachnoid) for microscopic examination, by Dr. Austin Flint, Jr., the results of which the following is his written account:

"Examined a portion of the brain taken from the base just back of com-

missure of the optic nerves, including part of the commissure, about forty hours after death.

"The object of the examination was to determine the presence or absence of tubercle.

"The parts removed were covered with a layer of coagulating lymph of a straw color, translucent, and of the consistence of thick jelly.

"On submitting portions of this and the subjacent tissues, to microscopic examination, in presence of Professors White and Flint, the characteristic anatomical elements of the brain were observed, together with masses of exudation matter and fatty granules, occasionally inclosing a blood-vessel.

"The so-called inflammatory and exudation corpuscles of Gluge and Bennett were observed scattered over the field.

"The microscopic appearances were characteristic of inflammation, attended with exudation of lymph, but not dependent upon the presence or deposition of tubercle.

"Repeated and careful examinations were made with reference to the presence of the characteristic tubercular corpuscle, but it was not discovered."

Recapitulation of Symptoms and order of their Development. Cephalalgia; accelerated pulse; dry, hot skin; thirst; anorexia; general exaltation of the intellectual faculties; vomiting; furred tongue; constipation; epistaxis; speech quick; incoherent; fretful, will laugh or cry without any apparent cause; sighs frequently; is inclined to get out of bed; a peculiar shining appearance of eyes; strabismus; tinnitus aurium; labored respiration; sighing deeply at short intervals; stupor; delirium; partial coma; loss of memory; confusion of thought; difficult articulation; increased squinting; deeper coma; pupils dilated; partial loss of vision; grinding of the teeth; oscillation of the eyeballs; coma more profound: entire loss of vision; cannot protrude tongue; deglutition difficult; retention of urine; profound coma; stertorous respiration; involuntary discharge of urine; convulsions; collapse.

Causes. Over exertion of the mental faculties at school, probably, operated as a predisposing cause in this case.

The early supervention of coma and the prominence of this symptom, together with vomiting, is worthy of note, as particularly diagnostic of the seat and character of the lesion.

"The average duration of meningitis, is according to Solly, about fifteen days. He divides it into three stages:

"The first, manifested by an exaltation of sensibility, hence cephalalgia; if seated at the base of the brain, drowsiness, nausea, vomiting.

"The second stage, the period of reaction, disturbance of muscular system, convulsions, delirium, agitation, contractions, oscillation, dilatation of pupila.

"The third, the shortest and the period of collapse, abolition of the senses, local and general paralysis, coma."—*Solly on the Human Brain*.

ART. II.—*Pleuro-Pneumonia. Bleeding in the Recumbent Position.*

By J. T. JAMIESON, M. D., South Otselic, Chenango Co., N. Y.

"Under no circumstances ought a patient to be bled whilst his head is nearly on the same level with the trunk."—*Copland's Med. Dict.* p. 225.

We have here, Mr. Editor, one of the most learned and eminent men in our profession, inculcating a positive rule from which there is to be no exception; and if the doctor is correct in his assertion, I certainly violated the rule in the following case, and my practice must be considered as bad indeed. The case occurred several years ago, and the patient being a near neighbor, I had the opportunity of visiting him frequently.

L. Cook, æt. 51, a farmer, and possessing a somewhat nervous and excitable temperament, as indicated, in part, by a slightly tremulous state of the hands. I was informed that about twenty years ago he had inflammation of the lungs or pleura, or both, for which he was bled several times, and so reduced, that he did not perfectly recover his strength for about twelve months. Since that period, he has generally enjoyed good health. For the last three weeks, he has been laboring under a severe cold, but not so as to confine him to the house.

Feb. 21st. He was seized with severe rigors, and felt miserably.

22d. He had a thorough sweat, and afterward took a dose of oil. On the afternoon of this day, I saw him for the first time. He was perspiring moderately; tongue coated, and disposed to be dry in the centre; pulse a little accelerated; respiration but little affected; has some cough; complains of a pain, or rather soreness, low down on the right side, and feels the pain when he coughs, but not severely, and can lie down on either side.

Mustard poultice to the side; pil. hydr. and pot. bi-tart.

23d. Mane. Appears better; less pain in the side; tongue not so dry, and fever less; has pain in the head, especially on the right side.

Cont. Med.

Vespere. Worse in every respect. Fever high; pain in the head distressing; pulse 93, full, and bounding; pain in the side not much worse; cough dry, and expectoration difficult; sputa present a decided rusty tinge; respiration a little accelerated.

I immediately opened a vein in the arm, having a teacup in the basin. By the time the teacup was full, he fainted away, and fell back on the bed. Having recovered in a few moments, he was again placed in the sitting position, and about two-thirds of a teacupful more flowed into the basin, when he became generally convulsed, and fell back on the bed again. He recovered immediately. The arm was now bound up, and the patient expressed himself as relieved. I saw him again in a couple of hours, and found that the pulse had regained nearly the same full and bounding character which it had presented before the bleeding; skin hot, but moist. The blood in the teacup much buffed and cupped, that in the basin not at all, but forming a solid mass of coagulam with only a few drops of serum. There was a deep conviction on my mind, that the patient ought to lose more blood, and that the vis a tergo, imparting such a character to the pulse, must be subdued. A vein was therefore opened in the other arm, having a teacup in the basin as before. The blood flowed freely, and before the teacup was full, he was again convulsed, and fell back on the bed. He recovered immediately, and having the impression that he ought to lose more blood, I allowed it to flow to about twenty ounces, whilst he lay in the recumbent position. He appeared to bear it well, and represented himself as much relieved. Pulse soft and small.

Pil. hydr., and pulv. Doveri, every four hours, and small doses of ant. tart. every two hours.

24th. Mane. Decidedly better. Pulse 100, small and soft; fever less; has not coughed much, and expectoration more free; still feels some soreness in the side; tongue coated in the middle, and clean at the edges; skin moist during the night; bowels moved last evening, the evacuation being thin, and of a dark green color; blood both in teacup and basin cupped and buffed, that in the teacup being the most so.

Cont. pil. et ant. tart.

1, P. M. Patient not so well; fever increased; pulse regained its full and bounding character; pain of the side increased since morning, and appears to the patient as if extending upward. A vein was opened for the third time, the patient being placed in the sitting position, but he became faint immediately, and being laid back on the bed, about sixteen ounces of

blood was removed into a teacup and basin as before. He was considerably affected by the bleeding, and immediately after the arm was bound up, became as before generally convulsed. He recovered in a few moments, a few drops of spt. æth. nitros. being then given to him.

Calomel and pulv. Doveri every two hours. Solut. sod. bi-carb. p. r. n. empl. lytta lateri.

Visited patient again in about two hours, and found him improved. Pulse soft and small; skin quite moist, and he has been sweating considerably since the bleeding; blood, both in teacup and basin, as much buffed apparently, as was that last abstracted, but not so much cupped; serum of a yellowish green color.

Cont. Med.

9, P. M. Still improving. Pulse 94, soft and small; skin quite moist, and he has kept perspiring since last visit; respiration easy; tongue moist and much cleaner; blister rising.

Cont. Med.

25th. Mane. Appears to have a little more fever this morning; pulse soft, but rather fuller than last evening; respiration natural; expectorates more freely, but the sputa still exhibit the rusty tinge. Had rather a restless night, owing, in some measure, to the blister, which pained him severely. Skin moist; tongue rather more coated; bowels moved once, the evacuation consisting of dark colored slimy matter.

Cont. pil. every three hours.

Vespere. A little more feverish and restless; pulse small and soft.

Cont. pil.

26th. Better. Pulse 94, and soft; tongue cleaning; expectoration rather difficult.

Ol. ricini cochl. mag., and after operation, continue pills.

Vespere. Oil not operated. Pulse 93.

Rep. oil.

27th. Mane. Bowels moved several times since last evening, the evacuations being of a dark green color. Pulse 72 and soft; tongue cleaning; coughs but little, and expectorates easily.

Omit pills, and give a small dose of pulv. rhei and magnes. calcin.

Vespere. Bowels moved several times during the day, the evacuations being much the same, with the exception of the last, which consisted of about a tablespoonful of jelly-like matter, tinged with blood; pulse 70; tongue cleaner; countenance improved.

Powders of pulv. Doveri and hydr. c. creta.

28th. Pulse 62; has had a good night; bowels not moved; has taken two of the powders.

From this date the patient rapidly convalesced, and was soon about his business, having enjoyed good health up to the present time.

Remarks. I regard the above patient as being the subject of a peculiar idiosyncrasy in relation to the loss of blood. I admit that this term is only a cloak to our ignorance, but it serves very conveniently to convey the idea of a particular condition of the system, concerning the essential nature of which we know nothing. I suppose the idiosyncrasy, in the present case, to have had its seat more particularly in the brain. It is obvious that the fainting and convulsions manifested by the patient, a hard working farmer and the subject of so acute and violent an inflammation, during the two first bleedings, and when only a few ounces of blood had been removed, could not be ascribed to the absolute loss of blood, but must, it appears to me, be attributed to a particular and inexplicable state of the nervous system. The practical point, however, is, and which has been my inducement to forward the case for publication, if it be, like the law of the Medes and Persians, unchangeable and without exception, that "under no circumstances ought a patient to be bled whilst his head is nearly on the same level with the trunk," what method of treatment would have been applicable to the above case? That the loss of blood was imperatively demanded can, I think, be questioned only by Botanics and all that genus, and under the circumstances, it only remained to resort to local depletion, the means for which were not at command; and supposing they had been, it does not seem to me that the local abstraction of blood would have availed anything, unless carried to the extent of influencing the general circulation, diminishing the vis a tergo, and subduing that full and bounding pulse, the instant feel of which, by the experienced physician, in an uncomplicated case of acute inflammation of the lungs and pleura, conveys to his mind the strongest conviction that the patient ought to lose blood, and that freely. Such being the case, I am unable to perceive any essential difference between abstracting a certain quantity of blood by leeches or cupping, the patient being in the recumbent position, and the removal of a like quantity from a vein whilst in the same position. In the local abstraction of blood, as by leeches, the patient being recumbent, we have frequently to judge of the effect of such loss of blood, and the extent to which it ought to be carried, by the aspect of the patient's countenance, and the state of the pulse, and why not be able to avail ourselves of the same means where it should seem necessary to resort to general deple-

tion in the recumbent position? There can be no question that the rule inculcated by Dr. Copland, ought to be generally observed, and that the occasions for deviating from it will be rare, as also that much care and judgment ought to be exercised whenever such deviation is made; but to affirm that under *no circumstances* it ought to be departed from appears to me like laying it down too absolutely, and that the preceding case affords an illustration of the same. Others may think just as they please, but I am under the fullest conviction that had no more blood been abstracted from my patient than could have been obtained whilst he remained in the sitting position, instead of being, as now, in the possession of good health, and managing his farm of fifty acres, he would, most probably, have been mouldering in the narrow house appointed for all living. I willingly admit that the third bleeding was hazardous, but yet regard it as proper under the circumstances, and as constituting the turning point in the case. It is not improbable, however, that could leeches have been applied to the side after the second bleeding, followed by a blister, or even the blister *per se*, the third bleeding might have been unnecessary, and such would be the practice I should adopt under like circumstances, in any future case, giving calomel also more early.

ART. III.—*A Case of Morbus Coxarius, with interesting and unusual Complications.* By O. C. GIBBS, M. D., Frewsburg, Chaut. Co., N. Y.

August 1st, 1853, I was called to see A. Young, aged 18 years, and found him laboring under considerable fever, with pain in the left leg, which the friends considered rheumatic. The pain extended throughout the whole limb, but was more severe in the knee, hip and ankle articulations. The patient had been engaged at work in the hay-field quite laboriously, being in unusual health, until about three days previous. He had a sore at the outer ankle, which was considerably inflamed and quite painful, which the patient thought originated in a gall made by his boot. The first sensation of pain was felt in the ankle, and the patient thought he had taken cold in the abrasion, caused by his boot, developing rheumatic pains in the whole limb, to which form of disease (rheumatism) he averred he was partially subject. His position was, by choice, upon his back, with the limb drawn up, and, after a careful examination, I found that movements of the hip-joint, and particularly a blow upon the knee, driving the head of the femur upward against the acetabulum, was productive of much increase of pain.

In view of all the circumstances, which it is not necessary to further detail here, notwithstanding the recent manifestations of the disease and the affection at the ankle, of which the patient was most disposed to complain, the case was diagnosed as one of synovial, or cartilaginous inflammation of the hip-joint.

As the patient was decidedly scrofulous, and as the febrile symptoms were by no means of a decided sthenic character, active antiphlogistic measures were not resorted to. Blisters were applied about the hip, and repeated as often as circumstances would permit; mercurial ointment, for a time, was rubbed into the groin; saline evacuants, and the iodide of potassium, were the only internal medicines administered in the early period of the disease.

After three or four weeks, chronic abscesses began to form in different parts of the body, appearing without any evidences of inflammation, and healing readily on the evacuation of the pus which they contained. The head, face, neck, body, and extremities, were subject to these abscesses; the limbs perhaps more so than any other part. The pus, in some instances, would burrow under the muscles, and at one time, the probe could be passed from an opening at the middle of the fore arm, down to the wrist and up to the elbow; also, from one in the leg, down to the ankle and up to the knee. Seldom more than two or three appeared at the same time, but continued, one after another, until between eighty and ninety in all were opened, discharging pus, in amount, varying from a teaspoonful to seven or eight ounces. Fortunately they were all superficial; the internal organs remaining exempt from these accumulations of pus.

During this period, various alteratives and tonics were given: as for instance, cod liver oil, the various preparations of iron, including the iodide, the bi-bromide, &c., iodide of potassium with syrup of sarsaparilla, quinine, &c., not all at once, but in succession and variously combined.

During this period, the hip presented the symptoms usual in morbus coxarius, evidences of suppuration manifested themselves, and about the middle of October, an opening was made into the cavity about the joint, a pint of pus evacuated, and the cavity injected with a solution, containing one part tincture of iodine and two parts water. The pus was withdrawn every or every other day, and the cavity injected, for several weeks, and subsequently less frequently with various injections to be mentioned hereafter.

Soon after the opening was made into the collection of pus about the joint, a spontaneous opening appeared in the lumbar region, on the left of the spinal column, and still later one on the right, both remaining open, constantly discharging pus, except when prevented by a compress and adhesive straps.

From the opening in the left lumbar region, a probe could be passed down upon the inner surface of the ilium, and an injection thrown into either of the lumbar openings, could be forced through this sinus in front of the ilium to the cavity connected with the joint, and out at either of its two openings.

Under the influence of these, and the many superficial abscesses previously referred to, notwithstanding the persevering use of tonics and nourishing diet, the patient rapidly emaciated, and his vital forces dwindled, under the influence of the exhausting discharges, to the lowest ebb compatible with the maintenance of life. Aphthæ appeared in the mouth and fauces, accompanied with cough and difficult respiration, and with tenacious, frothy mucous expectoration, as in capillary bronchitis. At this stage of the difficulty syrup of senega, with carbonate of ammonia, was given; also, the chlorate of potash in connection with stimulants and tonics. In passing, permit me to say that I have seen the chlorate of potash apparently operate most happily in some cases, with symptoms as above.

Though the patient's death was hourly expected, for two or three days, yet the pectoral symptoms gradually passed away and the patient began to improve. Though he did not gain flesh, yet he gradually returned to a tolerable degree of health; the sinus remained open about the hip and in the lumbar region, discharging less freely than at first, yet quite considerably. He remained thus comfortable through the winter and spring. During the summer and fall he was able to be taken from his bed and placed in a carriage, and to ride out every day, or less frequently, as suited his inclinations.

From extreme emaciation, or from spinal disease, he had but little control over his lower extremities, yet he could sit for a time, when placed in an erect position, and he would often amuse himself by shooting at a mark, or at birds upon the fruit trees, from his window.

The tonic and alterative plan of treatment was steadily pursued, with such variations in particular remedies, as circumstances seemed to justify. The sinuses were now injected only every second or third day, and tincture of iodine, tincture of myrrh, muriated tincture of iron, solutions of nitrate of silver, and sulphate of zinc, were all made use of, and with but little seeming difference in comparative results.

After the first three or four months of illness, he became considerably afflicted with gravel, occasionally passing stones varying in size from that of a kernel of wheat to a large sized pea. Once I was obliged to remove from the

urethra, with slender forceps, one lodged there, which he had not the power to pass or dislodge.

During the summer and fall of 1854, he had occasional attacks of bilious vomiting; these would return, with tolerable regularity, once in ten days or two weeks. Various remedies were tried to prevent their recurrence, without effect, until I commenced giving pills of extract of wahoo, two or three times a week; after which, these evidences of bilious derangement ceased to trouble the patient.

During the spring of 1855, the sinuses extended and formed openings at the lower portion of the ischium, and also near the margin of the anus. After these openings were formed, in consequence of their position, they formed the principal outlets for the pus, and being considerably inflamed and painful, they prevented any further attempts at sitting up or riding out.

From this date, he remained much the same through the summer, fall, and winter of 1855. The left leg was much shortened, the hip-joint immovable, and the knee bent at right angles, and fixed there in consequence of the rigidity of the muscles. In consequence of his position in bed, which was toward the right side, the chest became misshaped, and the heart dislodged from its natural position.

February 20th, 1856, he was taken with a severe chill, and for a few days previously he had been troubled with cough and difficult breathing. The chills recurred daily, and the gravity of the pectoral symptoms increased until the 25th, when he died.

I very much regret to say that no post-mortem was allowed.

From the dates, it will be seen that the patient lived more than two and a-half years after the attack, most of that time under the depressing influence of constant and exhausting purulent discharges.

There is one fact connected with this case which I have neglected to mention, which may and may not have had some connection with the origin of this difficulty. The patient, from childhood, had been afflicted with occasional paroxysms of asthma. Some person had told him that urine would relieve the paroxysms, and, if persisted in, ultimately eventuate in a cure; consequently, during the spring and summer preceding his attack, he had been in the habit of taking nightly, on going to bed, a draught of his own urine!

It is surprising to observe how indifferent persons sometimes are to judicious prescriptions, yet with what commendable perseverance they will take a filthy dose, when advised by some illegitimate and unreliable prescriber.

It is highly probable that the uric acid had much to do with the development of that tendency to the formation of chronic abscesses, with which morbus coxarius and the psoas disease had more or less connection, ultimately eventually in death.

ART. IV.—*Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity, AUSTIN FLINT, M. D., Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. VI. *Apoplexy and Paralysis; Pseudo-apoplexy, arcus senilis.*

We lay before the reader, an analysis of several cases of apoplexy followed by hemiplegia, inviting attention to several interesting points in the apoplectic attack and in the paralytic condition which followed it. We introduce, also, a case of pseudo-apoplexy with arcus senilis, in which there was suspected fatty degeneration of the heart.

Condition prior to attack; and mode of attack.

No. I, aged 40, not ascertained; paralyzed when admitted; right side affected.

No. II, aged 43, laborer; had received an injury on the head four years ago; skull probably fractured; one year since had an affection of the brain, was delirious thirteen days; since then, has been subject to pain in the head and has not regained his strength; last winter, suffered from an attack of rheumatism; during present summer, has been exposed to the sun, much of the time; was attacked whilst walking in the sun, with paralysis of left upper extremity; in a short time he became unconscious; remained so a day or more; on recovering, found himself hemiplegic. Left side affected; corrugator and orbicular muscles of left eye paralyzed; intercostal muscles of left side motionless. Sensibility not materially affected; paralyzed limbs seem to him to be increased in size.

No. III, aged 54, laborer; four days prior to admission, was suddenly attacked with paralysis of left side. The previous occurrence of an apoplectic stroke, could not be ascertained. Complained of pain in right side of head; sensibility of paralyzed parts not affected.

No. IV, aged 47, laborer; previous condition was not ascertained; when admitted, there was partial paralysis of left upper extremity.

No. V, aged 42, mason; father and brother had suffered from attacks of apoplexy; two years ago, fractured his skull, by a fall; was paralyzed a couple of months, but recovered perfectly the use of his limbs; this was his first attack of apoplexy,—was suddenly prostrated as though he had been struck; lost consciousness; entered hospital, paralyzed on right side.

No. VI, aged 78, butcher; has suffered much from rheumatism; delirious when admitted; previous condition could not be determined; paralyzed on left side; sensibility not affected.

In three of these cases, the previous occurrence of apoplexy could not be determined; but it is fair to presume that it had existed.

In one case, paralysis existed before the loss of consciousness; in another case, the patient was suddenly deprived of his consciousness, of sensation, and of motion; and in still another case, the occurrence of apoplexy was probable. We find, then, in these cases, exemplifications of two of the three different ways in which apoplexy is said to take place: it may be sudden, as in one of the above cases, and it may be preceded by partial paralysis, as occurred in another of these cases. All of these patients were paralyzed to a greater or less degree, on one side, when admitted; the left side being affected in four cases, and the right side in two.

The different forms of apoplexy may terminate in perfect recovery, which is rare; in death, which is common; and in partial or incomplete recovery, which is frequent. The patient usually emerging from the state of coma, with his intellect more or less perverted, the power of motion more or less impaired, and the sensibility to a greater or less degree affected.

The hemiplegia was perfect in none of these cases; some degree of motion was preserved in the extremities, or in the respiratory muscles of the thorax, or in the muscles of the eye, in each one of these cases, although the power of locomotion was lost in every one of them.

The corrugator and orbicular muscles were motionless, in one case, on the affected side; in another case, incompletely so.

The intercostal muscles, on one side, were paralyzed in a single case.

In only two of the six cases, were the extremities perfectly motionless; in the others, there was slight motion in the affected limbs.

In all the cases, the tongue was directed to the affected side; the mouth

and the uvula—in every case in which it was observed—were drawn toward the healthy side.

The sensibility of the paralyzed side consequent to an apoplectic stroke, may be extinguished or diminished or perverted. In most of the foregoing cases, it was not materially affected. The reflex movements were readily excited in every patient in whom the experiment was tried. The mental conditions of these patients, after the apoplectic attack had passed away, were quite different. It has been asserted, that—after an apoplectic stroke—the faculties of the mind are more or less changed: the serious person, becoming humorous; and the brave man, a coward. In the above patients the mental condition, prior to their illness, could not very well be determined. But, there were in the ward, at one period, three hemiplegic patients, exhibiting strikingly different conditions of the intellect: one was imbecile; another serious, or depressed; and another witty and humorous.

Much has been said by writers, on the predisposing causes of apoplexy; and various circumstances relative to the patient are generally supposed to favor the production of this disease. Thus, apoplexy is thought to be much more frequent in those classes of persons whose ancestors have suffered from this disease, “in those who possess a peculiar conformation of body,” as short and stout individuals, and in those who have passed the prime of life.

In only one of the above cases, the patient's immediate relatives had suffered from apoplectic strokes; two patients possessed the above-mentioned conformation of body; and four of the six patients were attacked at an earlier period of life than usually is the case. They were all laboring men; and some of them accustomed to indulge in spirituous liquors; two had previously sustained severe injuries of the skull, followed by affections of the brain.

We pass now to the consideration of those symptoms which are supposed to indicate the effects produced on the brain, by the presence of a clot of blood. In all those cases of hemiplegia due to the rupture of a cerebral vessel, blood is effused in one of three situations; it is poured out into the ventricles, or between the investing membranes, or into the substance of the brain itself: the latter being altogether the most common. The blood when effused into the brain substance, undergoes changes very similar to those which occur in any other organ, under like conditions. The blood coagulates, and the clot undergoes a variety of changes in different cases. The clot may be gradually, but completely absorbed. Many pathologists state, that—besides absorption of the clot—it may sometimes become organized. Often, how-

ever, the clot acts like a foreign body, and produces inflammation in the surrounding structure, which may be just sufficient to isolate the clot, or which may be so great as to result in the formation of pus. But there is always more or less irritation or inflammation, produced by the effusion of any amount of blood and the presence of the clot consequent to this effusion, in the substance of the brain. In several of these cases certain symptoms were manifested soon after the apoplectic attack had passed away, which tend to show that the clot of blood was producing more or less disturbance in the brain.

In Case, No. II, the patient was attacked on the 7th of July; on the 9th, he entered the hospital; he was placed on the use of diffusible stimulants and nourishing diet. He continued to improve every day after his admission; his intellect continued clear; he began to have some control over the lower affected extremity; his pulse was 64, and small.

On the 17th of July, *ten days* after date of attack, he manifested some aberration of mind, and the pulse rose to 116. On the night of the 17th, he was delirious, and singultus appeared; pulse 104, and quite feeble.

On the morning of the 18th, complained of slight pain in the head, near vertex in both sides. An opiate was given in place of the stimulant. This patient continued delirious at night, for some weeks.

In Case, No. III, the attack occurred on the 16th of May; admitted with hemiplegia, on the 20th. He seemed to be in a lethargic condition; his intellect was dull; he could tell his age, and how long he had been sick. Pulse small and numbering 72.

On the 22d, *six days* after date of attack, he manifested active delirium, which commenced during the night; he was talking constantly, and making efforts to get out of bed. His aspect was bright, instead of the previous lethargic condition; he was animated: answered questions quickly, but incoherently. Pulse 72. Passed evacuations in bed, involuntarily. Could move slightly the paralyzed limbs. Took his nourishment readily. On his admission, was placed on the use of brandy; various narcotics were added to the treatment; and on June 6th, he reports free from delirium, and very much improved.

Case, No. V, was attacked on night of March 27th; admitted to medical ward on April 5th. Has had no delirium; sleeps well at night; mind clear; pulse 80; appetite good; bowels constipated. A dose of magnes. sulph. was given, and patient placed on use of Huxham's tinct.

April 8th, *twelve days* after date of attack, this patient manifested symptoms of active delirium this morning: delirium during night. He talks incoherently, is irritable and excited by questions addressed to him. He is retained in bed with difficulty. His face is flushed; pulse 100. Brandy was administered.

On the 9th, no delirium during the day, some at night; mind clearer; pulse 76.

In this case, it is to be borne in mind, that the patient had abstained from liquor for five months prior to attack.

No. VI was delirious when admitted; no previous history could be ascertained; he was hemiplegic. Delirium was manifested by incoherent talking and by efforts to get out of bed, more marked at night.

In three of these cases, it is well to observe the condition of the patients prior to the appearance of the delirium; and then, to notice the sudden development of delirium, its character, the increased frequency of the pulse, and the result of the treatment.

Only one of these six patients died; this patient, after a protracted illness, succumbed from extreme prostration. The others recovered very slowly, and in a measure the use of the affected limbs. There was much indisposition in two or three of these cases, to make any efforts to get out of bed, sometime after they had regained sufficient strength and ability to move the paralyzed members. These patients had to be lifted out of bed, and various measures resorted to before they could be induced to help themselves.

Case of Pseudo-apoplexy.

James Williams, aged 56 years, admitted, October 10th. When admitted he was incompetent to give any account of his symptoms or history. His eyes were open; his expression was vacant; and he did not attempt to reply to questions. The skin was cool; the pulse small and not accelerated. The persons who brought him to the hospital could give no account of him, except that he was found in his present condition. He made no effort to walk; he required to be brought in and deposited on the bed, without the least exertion on his part. Respiration normal. Brandy and nourishment were alone prescribed.

The next morning he manifested some consciousness, but appeared idiotic.

He smiled when questions were put to him, but said nothing. The following day, improvement was more marked; said he was perfectly well. Could give no account of his attack. From that time he daily improved, and is now (Oct. 21st) walking about the wards, and out of doors; he makes no complaint; appetite is good; his aspect is now intelligent; he replies to questions correctly: says he had no recollection of his attack, nor of his having been brought to the hospital; says he was here two days before he came to himself; says that nothing is the matter with him but weakness.

This patient has the *arcus senilis* well marked, more so on the right than left side: in the right eye it extends nearly around the cornea; in the left, it is limited to the upper half of the circle. The pulse is 80, and quite feeble; skin cool; capillary congestion on hands. The face is pallid; the heart sounds are very faint; no bellows-murmur ascertained; no impulse seen or felt, except a slight shock seen in the epigastrium.

The patient is a carpenter and joiner; drinks moderately, averaging about half a pint daily. Has never had palpitation; never had a similar attack before. Has always enjoyed good health, except three years ago, when he had intermittent fever.

The treatment has consisted of Huxham's tinct., and full diet.

This patient left the hospital on the 24th, feeling very well; has not been heard from since. (*From Prof. Flint's Record*)

This case was supposed to be one of fatty degeneration of the heart. The diagnosis of this morbid condition cannot always be determined with accuracy, owing to the absence of any symptom characteristic of the affection. There are several symptoms, however, which — when they occur in the same case — render the existence of this condition of the heart, highly probable. "The diagnosis," says Dr. Stokes, "turns upon three points. The existence of physical signs and symptoms of diminished force of the heart. The occurrence of certain symptoms principally referrible to the brain, which indicate anæmia on the arterial, or congestion on the venous side, of the cerebral circulation. And symptoms referrible to the respiratory function which appear to arise from deficient power in the right ventricle." This disease, he says, is most common after the prime of life. The symptoms indicating its existence may be referred to the nervous, respiratory, and circulatory systems. There was presented in the foregoing case, the most important of these nervous phenomena, namely, the sudden supervention of an apoplectic condition: differing from true or sanguineous apoplexy, in the frequency of the attack, and in the infrequency of consequent paralysis. These attacks

are due to deficient arterial supply, or to venous congestion in the brain; the former opinion, according to Dr. S., is the most tenable; the suddenness of the attack and the rapidity of the recovery also, favor this view. There were, however, no prominent symptoms presented, referrible to the respiratory or circulatory system. Dr. Stokes mentions a peculiarity in the respiration, which he has only observed in cases of fatty degeneration of the heart. "It consists in the occurrence of a series of inspirations, increasing to a maximum, and then declining in force and length, until a state of apparent apnea is established. In this condition the patient may remain for such a length of time as to make his attendants believe that he is dead, when a low inspiration, followed by one more decided, marks the commencement of a new ascending and then descending series of inspirations."

A singular appearance of the cornea, has been noticed by Dr. Quain and Mr. Canton, in persons who have been affected with fatty degeneration of the heart. And this appearance when present, will assist in the diagnosis of the disease. Dr. Williams, also, has met with this sign in persons who present symptoms of weakened heart. This is *arcus senilis*, a peculiar opacity of the circumference of the cornea, probably due to fatty degeneration of this structure. This sign was finely exemplified in the above case. Attacks of pseudo-apoplexy, accompanied with feebleness of the heart's action, with the presence of *arcus senilis*, and followed by the beneficial effects of a stimulating and tonic course of treatment, may be supposed to indicate, pretty certainly, the existence of fatty degeneration of the heart.

ART. V.—*Clinical Reports of Diseases, Injuries, Surgical Operations, &c., &c., in the Male and Female General Surgical and Private Wards of the Buffalo Hospital of the Sisters of Charity.* Care of Prof. HAMILTON, for the winter half year commencing Oct. 1st, 1856. By BENJ. H. LEMON, M. D., formerly House Surgeon.

(Continued from Page 167.)

CASE VII.—*Ptosis. Operation, and good result.*

Dr. —, æt. 23 years, lately graduated in Toronto. Has falling of the eyelid; been in this state many years; came on after a splinter had run through the palpebra. It covers about two-thirds of the globe, when opened to the utmost extent of his ability. The tarsus is everted, and cellular tissue thickened in consequence of an unsuccessful operation.

Diagnosis. Falling of the lid in consequence of paralysis of the levator palpebræ, caused by injury to its motor nerve, "the distribution of the superior branch of third pair."

Operation was made by excising a portion of integument from the superior part of the vertical diameter of the lid, about six lines in width, thus bringing the palpebra somewhat under the influence of the occipito-frontalis, by taking out the skin at the upper margin of the lid, a tendency to greater eversion of the tarsus was avoided. Three sutures were applied and a pledget of lint wet with cool water.

The tarsus will now come about one line below the superior margin of the cornea, when open; and when shut a narrow line can be seen at the center, not sufficient to cause inconvenience.

At his own urgent request chloroform was given, which made him very unruly, he having to be held.

In the operation for ptosis, it is desirable to remove enough to secure a sufficient elevation of the eyelid without at the same time taking as much as will prevent closure and coaptation of the tarsi, because if the fissure between them was wide, the globe of the eye would become dry and injured. As a general rule the amount required to be removed is greater than would be generally supposed; this is one of the two errors into which the first operator fell, namely, first, not removing the integument extensively enough; and secondly, not removing that portion in the proper place, but taking it out at the tarsal side of the median transverse line, thus causing eversion.

CASE VIII.—*Subacute Synovitis, with effusion; left Knee-joint. Recovery, with impaired motion.*

There was a number of cases of this character; all, except the two cases I shall report, recovered entirely the use of their limbs.

John McGarty, æt. 30 years; laborer; of nervous temperament, dark complexion. Admitted Dec. 8th. He works in a grain elevator; is exposed to cold. His work in shoveling causes him to twist around; the condyles of the femurs rotate on the articular surfaces of the tibias, while the feet are embedded in the grain and do not move, thus straining the ligaments and subjecting the articular surfaces to actions they were not intended to subserve, the joint being purely ginglymoid, and any other motions unnatural, and injurious.

The patient took cold, and six days ago while at work, he felt sharp pain

in the left knee, which increased so much that he was obliged to go home. The limb became swelled, and the joint stiff: motion causing pain. The region of the joint is much enlarged, chiefly at the sides, and above the patella, caused by effusion in the sac of the synovial membrane.

Diagnosis. Subacute synovitis, with hydrarthrosis.

Treatment. The dorsal-recumbent posture; the limb extended, and the joint supported by a pillow; antiphlogistic regimen; tincture of iodine painted on and around the region of the joint, and occasionally a blister to be applied.

He soon required supporting by ale, quinia, &c. He slowly improved, however, suffering much from the pain in the joint, particularly at night.

He continued in the house until the close of Prof. Hamilton's service, the joint gradually improving.

I saw him after he had been discharged, sometime in May; he could not yet bear any weight upon the limb; it was considerably larger than the sound one, about the joint; the muscles, both above and below, were much emaciated; motion was much impaired; doubtless, however, the size will become much reduced, and a considerable amount of action restored with the lapse of time, as his general health and strength improves, and ultimately a good and useful limb may be expected.

"Sir Benj. Brodie" records ten cases of synovitis in the knee joint. In five, there was recovery, with impaired motion of the joint. In one, no stiffness remained; and in four, he does not state whether there was this defect or not.

As to causes, scrophula seems the predisposing, and exposure to cold, dampness, sprains, injuries, &c, the exciting. It commences by the usual phenomena of inflammation, a preternatural secretion of synovial fluid, effusion of coagulable lymph in the cavity of the joint, if not checked suppuration of the synovial membrane, collections of pus in the cavity, which, with serum and lymph is effused into the tissues external to the joint, the pus burrowing under the fasciæ and tendons, forming cavities and sinuses; finally, softening, degeneration, and ulceration of the coagulated lymph, cartilages and ligaments, and total destruction of the joint results, which the following case will illustrate.

CASE IX.—*Synovitis, Ulceration of the Synovial Membrane, Cartilage and Ligaments, and Caries of the Articular Surfaces, and Cancellous Tissues of the Bones of the Knee-joint. Amputation at the middle of the Thigh. Morbid appearances. Death of the patient in six weeks.*

Thomas Walsh, æt. 28 years, stout, laborer. Admitted Jan. 28th. The winter of 1854, whilst walking on the railway, he fell, striking the inside of his left knee on the iron rail, hurting it severely; swelling very soon occurred, and the joint became stiff and sore, and he was unable to bear weight on the limb all winter; by the summer it was sufficiently well for him to go about, and he began hard work in the freight house. The winter following it again inflamed, this time without any external cause; it soon recovered.

The summer of '55 this joint was again hurt on the inside, and he was a cripple for several weeks; the inflammation finally disappeared, but left the knee larger than that of the sound limb, and he returned to his duty on the railway.

Oct., 1855, he received a heavy blow from a plank, on the outside of his knee. The joint grew inflamed and swelled to a larger size than it had at any previous time. Motion was entirely lost, and the pain extreme. The symptoms gradually became worse, and he has been incapacitated for any work since.

Present State. Lies on his back, the limb extended, and knee supported with a pillow. The joint is much, and unequally enlarged; the leg cedematous, pitting under pressure of the fingers; muscles of the thigh emaciated, (as indeed is the whole body); partial luxation of the tibia backward on the femur, (the consequence of softening and relaxation of the ligaments); crepitus on manipulation, an abscess pointing to the external side, and below the patella; general constitutional disturbance: namely, hectic fever, loss of appetite, night sweats, want of sleep, great pain, emaciation, and general irritation.

The abscess being opened, a large quantity of unhealthy, thin, bloody pus, with cheesy flakes, was poured out, greatly relieving the patient for a time: sustaining treatment with poultices to the knee. Being informed that he would have to lose his limb, he said death was preferable.

12th. Abscess having pointed on the inside, was lanced; from this time the flow of pus was increased, of the same character described above, and

in quantity about one pint in twelve hours. He cannot sleep without large doses of opium, and all the symptoms are aggravated, though he has been all the time on full sustaining treatment.

21st. Is much weaker, and in view of speedy dissolution, is desirous of availing himself of any chance an operation may afford, of preserving life.

In consultation with Dr. White, and several other gentlemen, the operation was decided upon, although the result was considered very doubtful.

The same day, (Feb. 22d,) in presence of a number of professional gentlemen, and the class from the Medical College, assisted by Dr. Boardman and others, Dr. Hamilton amputated at the middle of the thigh, without chloroform, the patient preferring the operation without anæsthesia; effusion of blood was very slight; he seemed, however, considerably prostrated after being placed in bed, but rallied with the exhibition of brandy and water.

Dr. Boardman took charge of the patient. Joint examined immediately.

Pathological Observations. On laying open integuments found numerous large sinuses filled with pus. Cavity of the joint being laid open, it was also filled with pus. Of the synovial membrane, some portions were thickened, others entirely gone. The crucial ligaments had entirely disappeared, and also most of the semi-lunar cartilages. The lateral ligaments were softened and easily detached from the bones; articular surfaces of condyles of the femur, and the tibia were carious, and the cancellous tissue excavated, resembling honeycomb. The ends of the bones were preserved, and are now in Prof. Hamilton's cabinet.

"Brodie" records five cases in which death resulted from this disease, and five more in which the limb was amputated, in all which the pathological observations are recorded.

Of the history of the patient subsequent to the operation, I am ignorant, save that the wound began slowly to heal, by granulation and secondary adhesion. Subsequently collections of pus in various localities, and death six weeks after the operation.

ART. VI.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, Aug. 4, 1857.

The association met.

Present—The Vice-President, Dr. Wyckoff, in the chair. Drs. Root, Nichols, Eastman, Fanner, Wilcox, Rogers, Rochester, Strong, Whitney, Ring, Newman, Hunt, Dayton, and Gay.

The minutes of the preceding meeting were read and approved.

Drs. Charles Fanner and Henry Nichell were elected to membership.

The committee on puerperal convulsions asked further time to report. Granted.

Prof. Rochester reported a case of rheumatism remarkable for the variety of organs it attacked and in proving fatal. The patient was a healthy and robust man, a soap and candle maker by trade, and of intemperate habits. When first attacked he was suffering from what appeared to be bilious cholera, but Prof. R. diagnosticated rheumatism of the muscular coat of the bowels. This was relieved when a second attack upon the diaphragm occurred followed by metastasis to the knee, then to the heart, a bellows murmur accompanying its sounds, then again to the diaphragm. The bellows murmur ceased after this metastasis. Receding from the diaphragm it involved the muscular coat of the stomach. The dyspnoea and pain in the midriff were replaced by general prostration, vomiting, and extreme irritability of the stomach. During all these changes about four weeks of time were consumed during which the patient steadily lost ground. From the stomach the disease progressed to the muscular coat of the bowels and then attacked the lung.

The symptoms were those of pneumonia, but not of the frank form. There was little cough and only once rusty sputa. There was, however, a distinct crepitant râle. From this he was relieved under treatment, but a noteworthy fact is that immediately on the subsidence of the pneumonia the rheumatism immediately renewed its onset on the bowels, an incident of disease mentioned by La Roche in his work as not very uncommon in rheumatic pneumonia.

The rheumatism of the bowels was followed by dysentery, and at the end of the eighth week he seemed free from everything except serious prostration. About the middle of July, he was left one afternoon in a comfortable and apparently convalescent condition, but Dr. Rochester found him next morning, suffering from meningitis, which was followed rapidly by effusion

and death. Whether the meningitis was rheumatic or not Dr. Rochester was not fully satisfied. At times during the progress of the disease, the patient had had symptoms of delirium tremens, from which, however, he had been quite free for some time before his death.

Prof. Rochester had seen one other fatal case of rheumatism. It was at first lumbar, then underwent a metastasis to the knee, where it became persistent; abscess formed, followed by phlebitis and consequent death.

Dr. Wyckoff also related a fatal case of rheumatism. A gentleman, aged 34 years, whose habits had been for some months intemperate, was taken with mild lumbar rheumatism, which passed down to the hips and thence to the knees, which latter were very much swollen for four or five days, when it went to the ankles and thence to the toes. After this were attacked, successively, the elbow, shoulder and wrist of one arm, and next the other arm. Later in the disease, he suffered from bronchial trouble, followed by congestion first of the right and then of the left lung; but he finally seemed convalescent from this. Dr. Wyckoff left him one evening appearing comfortable. During the night he slept, at first, well, then became incoherent and delirious, but the nurse not being aware of his danger, delayed sending until morning. At 7, A. M., Dr. W. found him apoplectic, comatose, and with stertorous breathing. He died at 8½, A. M.

Dr. Wilcox alluded to a case which he had reported some time ago, with reference to the question whether a syphilitic taint existing in the system was not sometimes roused to activity by rheumatic attacks. The patient alluded to had suffered from rheumatism which was evidently connected with syphilis, but, when apparently improving, had serous apoplexy, and died.

An inquiry was made as to the prevalence of summer diseases. Very little of diarrhoea or its congeries had been seen.

And the association then adjourned.

SANFORD B. HUNT, Secretary.

ART. VII.—*Elements of Pathological Anatomy.* By SAMUEL D. GROSS, M. D., Prof. of Surgery in the Jefferson Medical College of Philadelphia, etc., etc. Third edition, modified and thoroughly revised. Illustrated by three hundred and forty-two Engravings on Wood. Philadelphia: BLANCHARD & LEA. 8vo., pp. 771. 1857.

The second edition of the treatise on the elements of pathological anatomy by Prof. Gross, appeared in 1845. During the twelve years that have elapsed, this field of scientific research, not less than other departments of medical knowledge, has undergone important changes due to its diligent, skillful cultivation. Continued study, especially by means of the microscope and chemico-anatomical investigations, has developed new facts and relations, increasing our knowledge both by freshly added truths and by expanding, confirming or correcting views which at that time seemed most consistent with the existing state of science. A new edition of the work, in the opinion of its author, was called for in order to render it a correct exponent of the elements of pathological anatomy at the present time; and, with Prof. Gross, to see before him a duty to be performed, is sufficient for him to enter at once upon its performance, without regard to the labor which it involves, and to apply himself unremittingly to the task till it is finished.

In the present edition, we have, in effect, a new treatise on the elements of pathological anatomy. Notwithstanding modifications and largely added matter, its size is somewhat less than that of the edition of 1845. The explanation is as follows: In the second edition much was introduced which was relevant to, and appropriately associated with the subjects embraced in pathological anatomy; but, yet, not intrinsically belonging to this department of science. Points relating to histology and diagnosis, occupied considerable space. This adjunctive matter has been omitted and the work restricted in its scope more rigidly within the boundaries of pathological anatomy. The extended plan of the second edition was more called for at the time of its publication than now, the points relinquished having, in the mean time, received more consideration than previously in other treatises. The space thus made vacant by excluded matter, left abundant room for the additions requisite in bringing the work up to the present state of science, at the same time, permitting a reduction in the size of the volume.

The task which the author imposed on himself in preparing a new edition of the work, was not a light one. It was widely different from that of sending forth a new edition with simply a few addenda. It involved a careful reconsideration of all the various subjects treated of, and a reconstruction of

the treatise, the latter requiring much to be rewritten. None can adequately appreciate the labor of such an undertaking but they who have had some experience in bibliography. We congratulate the author on the completion of the task—a task devoid of the stimulus which we may suppose lightened the labor of writing the first edition, when reputation as an author was yet to be acquired. The desire of rendering a service to science and his profession must have been the chief source of encouragement during the many hours of drudging toil which the task required.

The general arrangement of the new, is the same as that of the preceding edition. The work is divided into two parts. Part *first*, embracing 192 pages, is devoted to the “general principles of pathological anatomy.” In this division are considered, inflammation and the various processes incident thereto; transformations of structure; hypertrophy and atrophy, pneumatosis, polypæ, hydatids, serous cysts, and the several heterologous formations. Part *second* is entitled “special pathological anatomy,” and treats of the morbid changes occurring in the blood, the different tissues, anatomical systems, and the more important of the organs of the body.

Availing himself of the contributions which have been made of late years to pathological anatomy by Rokitsansky, Hasse, Vogel and others; and also of the coöperation of Dr. Da Costa, of Philadelphia, whose labors in microscopical research already entitle him to high distinction, Prof. Gross has, in addition, embodied in this treatise much that is original. Formerly a public teacher of this branch of medicine, it has continued to occupy a portion of his studies since the publication of the first edition of the work in 1839. During this period he has collected and registered a large number of observations with which the pages of the present edition are enriched. The work, therefore, is by no means to be considered as merely a compilation. In this particular it may be contrasted favorably with a recent English treatise on the same department, of undoubted merit, but which is, in a great measure, an abridgement of the more elaborate work by Rokitsansky.

The work by Prof. Gross is professedly elementary. The author does not aim to carry the reader to the farthest extent to which researches relating to the different subjects have been pushed. His object is to introduce the medical student to the pursuit of pathological anatomy, and to place before him those facts and considerations belonging to this province of science, in its present condition, which are practically most important. Such a work is, we think, needed. Pathological anatomy, which at one time was too exclusively cultivated, is at the present time, perhaps, in some danger of being unduly depreciated. True it is that morbid changes which our senses

can appreciate, do not constitute the primary, essential abnormal aberrations of disease. There are perversions more occult which underlie the deviations from normal structure and the alterations in fluids which it is the province of the anatomist to study and describe. The appreciable anatomical characters of disease are the effects of ulterior, inappreciable disturbance of the conditions of health. True as this is, however, the sensible changes in the solids and fluids of the body are, and ever will be of fundamental importance as a basis not only of pathology but of practical medicine. It is, and always must be, a grand object for the medical and the surgical practitioner to recognize and discriminate these changes in the living organism; to know all that can be known, severally, respecting their nature, laws and tendencies, as the true point of departure for the application of remedial measures. Moreover, the facts developed by the study of morbid anatomy constitute the scaffolding by which the scientific inquirer may hope to ascend higher and higher toward the region in which rest the primary and essential truths of pathology. We concur fully in the author's remarks, in the preface, on the importance of the branch of which he treats, and on the insufficient degree of attention bestowed upon it in most of our medical schools. We trust that the publication of this treatise may lead to the result which he hopes for, viz., arousing the attention of the profession to the claims of pathological anatomy.

The numerous illustrations contained in this work enhance in no small degree its value. Of the three hundred and fifty-two wood engravings distributed in its pages, one hundred and thirty are newly added in the present edition. The larger portion of these are from drawings of specimens contained in the cabinet of the author and collected mainly from his own cases. This statement shows the extent to which he has contributed original matter in preparing the work.

In commending the work to the student and practitioner, we simply discharge a duty which the journalist owes, not alone to the author, but to the medical profession of this country. Duty alike to the profession and to the author, dictates something more than this. The bibliographical labors of Prof. Gross, reflecting the highest honor upon his talents, zeal and learning, involve a debt of gratitude which is not to be measured by the intrinsic merit of his publications, however great. A still deeper obligation attaches to the example which his career affords to the junior members of the medical profession. Beginning professional life without any exemption from the difficulties and trials inseparable from a dependence on medical practice; attaining to an enviable position as a practitioner and teacher, and devoting

himself assiduously to the duties incident thereto, he has accomplished, in addition, an amount of scientific and literary labor, which may serve to exemplify how much can be effected by a determined purpose and unremitting industry, in spite of the discouragements and drawbacks arising from the distracting, irregular and almost incessant claims which the busy practitioner often pleads as a sufficient excuse for undertaking nothing beyond the practical exercise of his avocation.

We might point to the example of Prof. Gross, as in another aspect worthy of imitation for those aspiring to usefulness in a career of authorship. Not content with having accomplished enough to satisfy an honorable desire for distinction, he does not tire in laboring for the interests of his profession. At the present moment, not resting after the completion of the treatise which we have inadequately noticed in this brief article, he is busily engaged in the composition of a great work on surgery, which will be the capital of a column more enduring than marble, and which will hereafter inspire many an earnest spirit in the ranks of the medical profession with a desire to follow in his footsteps.

For sale by PHINNEY & Co.

*

ART. VIII. — *Researches into the Structure and Physiology of the Kidney.* By C. E. ISAACS, M. D., Demonstrator of Anatomy in the University of the city of New York. Read March 5, 1856. Published in the Transactions of the New York Academy of Medicine, vol. i, part ix. S. S. & W. Wood. 1857.

It is rare that the journalist in this country has an occasion to notice a paper of this character; a paper giving the results of extended and carefully conducted researches into a province of minute anatomy. The subject is an important one. Points of pathological interest of direct practical application, concern the structure and physiology of the kidney. The investigations of Bowman, and more recently, the elaborate researches of Dr. George Johnson, have shed much light on the subject. Still, there remained doubtful and mooted questions; and the object of Dr. Isaacs in giving his studies this direction was, if possible, to clear up certain obscure and questionable points, and, at the same time, either to correct or confirm those of the statements of other observers which have been considered as established. The paper read to the Academy of Medicine, contains an account of observations continued daily for twelve months. The kidneys of a great number of animals

were subjected to microscopical examination, viz., the frog, turtle, snake, alligator, fish, bird, mouse, rat, squirrel, cat, dog, racoon, rabbit, hog, sheep, deer, elk, moose, ox, horse, black bear, rhinoceros, monkey and man. The author says, "Entering upon this examination without any preconceived theory, it has occupied my attention for some years past, and for the last twelve months I have labored on the subject almost daily, sparing neither trouble, time, nor expense, and carefully guarding against arriving at any conclusion until after long-continued and repeated examinations."

In some important conclusions Dr. Isaacs differs from previous observers. Mr. Bowman and Dr. Geo. Johnson regard the epithelium lining the tubes of the of the cortical portion of the kidney, as belonging to the spheroidal or "glandular" variety. Dr. Isaacs is satisfied that these tubes are lined by permanent or tessellated epithelium. He thinks these observers have been deceived by the specimens not being fresh, or in a pathological condition, or the epithelium having undergone change by the mode of examination. On the supposed character of these cells is based, in fact, the opinion of Bowman and Johnson that the true secretion of urine, i. e. the separation of the urinary principles, takes place exclusively in these tubes. Dr. Isaacs, as will be presently seen, dissents from this opinion.*

Bowman and Johnson deny the existence of nucleated cells upon the malpighian tufts: in other words, within the expanded extremities of the convoluted tubes. Dr. Isaacs believes that he has demonstrated the presence of cells in this situation. According to the views of Bowman, the vessels forming the malpighian tuft lying naked within the extremities of the tubes, water transudes readily under the hydraulic pressure of the blood in the arteries; hence, the water of the urine, its escape being due purely to physical causes. If, however, the observations of Dr. Isaacs are correct, the urinary secretion proper is not alone from the renal portal veins, but also from the malpighian tufts; in other words, it takes place into the extremities of the convoluted tubes, as well as along their course. The latter view Dr. Isaacs sustains by various contingent facts.

The existence of a fibrous matrix in the kidney, has been denied by some and maintained by others. Dr. Isaacs appears to have established the fact of its existence beyond a doubt. In demonstrating this, as well as other points by means of the microscope, Dr. Isaacs has resorted to methods of

* That is, these observers claim that the secretion takes place within the tubes exclusive of the flaked extremities containing the malpighian tufts.

displaying the structure of the kidney more successful than those hitherto employed. In this consists an original feature of these researches.

The paper contains a great number of wood cuts representing the appearances of the different structural elements of the kidney, in different animals, as seen with the microscope.

We trust that hereafter the medical journalist will have more frequent occasions than heretofore to notice researches of this character. In such scientific contributions we are behind other countries. But with men like Dalton, Isaacs, Leidlly, Da Costa and others to lead the way, we may hope that ere long our country will not be open to this reproach. Aside from the intrinsic value of these researches, they will be useful by way of inciting others to similar efforts to advance our knowledge in medical science. They reflect honor on Dr. Isaacs, on the New York Academy of Medicine, and on the profession of this country. *

ART. IX. — *The History, Diagnosis and Treatment of the Fevers of the United States.* By ELISHA BARTLETT, M. D., late Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the State of New York, etc., etc. Fourth edition, Revised. By A. CLARK, M. D., Professor of Pathology and Practical Medicine in the College of Physicians and Surgeons of the State of New York. Philadelphia: BLANCHARD & LEA. 1857. 8vo. pp. 610.

It would be more than an act of supererogation, at this day, to invite the attention of our readers to the merits of the work on fever by the late Dr. Bartlett. It would be a reflection on their information and intelligence. The work has become classical in medical literature. The value placed upon it by the profession is shown by the demand for a fourth edition, the first having been issued ten years ago.

The present edition has been prepared since the death of the lamented author. The duty was confided by the author himself during his last illness, to his intimate friend, Prof. Clark; and to no one could it have been more appropriately committed. To edit the work was with Prof. Clark a labor of love. Moreover, his own studies eminently fitted him to fulfil the trust, — on the one hand to his endeared friend, and, on the other hand, to the medical profession.

Five years only have elapsed since the publication of the third edition of this work; but in that time, to quote the language of the editor, "new facts have been observed, and new opinions have been expressed, which both add

to our knowledge and suggest new topics for investigation." Hence, although as the editor states, scarcely a dozen phrases have been changed, considerable matter has been added in the present edition.

Believing, as we do, that the facts and doctrines contained in this work are not likely soon to undergo essential alterations, as medical knowledge advances, we predict that it will long remain, as it now is, preëminently the standard work on the fevers of the United States.

For sale by PHINNEY & Co.

*

ART. X.—*Report of Mortality in Buffalo for the month of July, 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accidens, ...	7	7	
" Asphyxia Immersorum, ...	12	10	2
Croup, ...	1		1
Cholera Infantum, ...	10	5	5
Cholera Morbus, ...	2	2	
Cephalitis, ...	4	1	3
Coup de Soleil, ...	2	1	1
Cancerum Oris, ...	1		1
Dysenteria, ...	2	1	1
Dentitio, ...	2	2	
Diarrhœa, ...	6	3	3
Debilitas Senilis, ...	4	2	2
Eclampsia, ...	14	7	7
Enteritis, ...	1	1	
Febris Typhoid, ...	3	2	1
" Typhus, ...	2	1	1
" Scarlatina, ...	10	6	4
" Puerperalis, ...	1		1
Gastritis, ...	1		1
Gangrena Pulmonum, ...	1		1
Hydrops, ...	2	1	1
Hydrocephalus, ...	3	1	2
Hyperæmia Cerebralis, ...	4	3	1
Hyperæmia Pulmonalis, ...	2	2	
Intemperance et Delirium Tremens, ...	5	4	1
Ignotus, ...	15	4	11
Marasmus, ...	4	1	3
Morbus Cordis, ...	1	1	
Necrosis Femoris, ...	1	1	
Pertussis, ...	1		1
Pneumonitis, ...	6	1	5
Parturitio, ...	1		1
Rubeola, ...	3		3
Still-born, ...	8	5	1

REGISTER OF MORTALITY—CONTINUED.

DISEASES.	No.	Males.	Females.
Tuberculosis Pulmonalis, ...	26	8	18
Tumor Abdominis, ...	1	1	
Tetanus, ...	1	1	
Total, ...	170		

SEXES.

Males, ...	85
Females, ...	83
Sex not given, ...	2
Total, ...	170

AGES.

Still-born, ...	8	Between 20 years and 30 years, ...	27
1 day, ...	2	“ 30 “ “ 40 “	18
1 day and 30 days, ...	5	“ 40 “ “ 50 “	14
Between 1 month and 6 months, ...	21	“ 50 “ “ 60 “	2
“ 6 months and 12 “	13	“ 60 “ “ 70 “	7
“ 1 year “ 3 years, ...	29	“ 70 “ “ 80 “	1
“ 3 “ “ 5 “	8	“ 80 “ “ 90 “	0
“ 5 “ “ 10 “	7	“ 90 “ “ 100 “	0
“ 10 “ “ 20 “	8	“ 100 “	0
Total number under 10 years, ...	93	Total number over 10 years, ...	77
Ages not given, ...	2	Total, ...	170

NATIVITIES.

American, ...	73	Prussian, ...	1
German, ...	43	Welsh, ...	0
Irish, ...	29	French, ...	2
English, ...	2	Scotch, ...	1
Canadian, ...	0	Holland, ...	1
Swiss, ...	1	Country not given, ...	17
Total, ...			170

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS

New York Academy of Medicine.—Puerperal Fever.

(Continued from Page 114)

Prof. Clark said: I will make a few remarks on the subject asking your indulgence for the reason already given. It will be remembered that the pathology of this disease occupied a considerable portion of the attention of the Academy, on a former occasion. I then stated that the fever was in its nature *inflammatory*, that it is a fever with demonstrable lesions in every case. I also stated my conviction that those cases described by Gooch, Simpson, and others, as without lesion were cases of pyæmia, and that pyæmia has its source in the inflammation of the inner surface of the uterus; and the facility with which the uterine sinuses could convey the pus into the system, was shown. Where a patient has died of puerperal fever, supposed to be without lesions, I had been able to demonstrate the existence of this pus, and I have not been able to demonstrate it in cases where patients have died of puerperal convulsions. In addition to the views then given, I would state that where inflammatory fibrinous exudation has been found on the inner surface of the uterus, without pus, pus may still be the result of the same inflammation as it extends to terminal uterine sinuses.

In two cases, lately, I have found secondary deposits of pus in distant parts of the body, the results of the purulent contamination, and yet the secretion was not pus, but was fibrinous on the inner surface of the uterus.

We have lately had a form of puerperal fever at Bellevue Hospital, with the pathology of which I have not before been familiar, and which, I have reason to think, has not been so thoroughly studied by the profession as that of other forms. Its prominent lesion is inflammation of the inner surface of the uterus, with evidences of general purulent contamination; and the disease is unusually protracted. The patients have lived, in several cases, from ten to thirty days; and the *post-mortem* examinations have demonstrated the existence of secondary purulent deposits, and pus on the inner surface of the uterus, and in its veins or lymphatics.

•

This form of the disease is more insidious in its approach—is often devoid of the symptoms that mark the onset of the ordinary attacks of puerperal fever, and is more allied to typhoid fever. I can best illustrate this by giving the history of a case, drawn up for me by Dr. McEwen, of the Hospital corps.

CASE I.—Clara Byrne, native of England, æt. 26 years; was delivered, April 25, the duration of her labor being one hour and a half; was a passenger on board the *Cornelius Grinnell*, arrived in this country after a voyage of five weeks, April 21st, 1857; she suffered from sea sickness during the whole voyage.

April 26. Was admitted to the hospital to be delivered; half an hour after being admitted, her labor began, and she was delivered of a healthy child; she complained of nothing till May 1.

May 1. Had a slight diarrhœa; stated that she had been deaf for a few days past, and that the deafness was gradually increasing; complained of slight headache and shooting neuralgic pains in the left supra and infra-orbital nerves.

Ordered—lotion of chloroform and aconite, for neuralgia, and gr. ss. of morphine to procure sleep.

May 2. Neuralgia had disappeared; headache had disappeared; complained of general feeling of malaise; lochia were normal.

May 3. Headache worse; slight epistaxis from left nostril; half dozen dry cups to the neck relieved the headache.

May 4. Diarrhœa continues, worse in the evening; tongue furred and white in the centre; pulse 80.

Ordered—castor oil and laudanum, gtt. 40.

May 5. Diarrhœa not as bad; the feeling of general weakness had increased; experienced slight chilly sensation, most marked toward evening. (This recurrence of the chilliness toward evening will be found to be a marked symptom of the case.) Symptoms continued the same up to

May 9. Diarrhœa continues; slight white fur on the tongue, and a disposition to become dry; lochia stopped.

Repeated castor oil and laudanum; port wine every hour.

At 6, P. M., had a severe chill, lasting about fifteen minutes, with increased feeling of general weakness.

9, P. M. Face flushed; tongue rather dry; pulse 100, and intermitting; headache very severe; bronchitic râles heard over the whole chest; a slight murmur heard at the base of the heart; systolic, and not conducted to the vessels.

May 10. Pulse 128; weakness increased; deafness marked. (Thus it will be seen that the symptoms have come on gradually; there has been no marked period of invasion.) Transferred from the lying-in-wards to ward 28.

5, P. M. Pulse 120; skin hot and perspiring; lochia ceased; diarrhœa slight; two discharges; tympanitis slight; *no tenderness on pressure over abdomen or over uterus*; no mammary secretion; tongue dry, and slightly coated brown; face flushed.

May 11. Pulse 92; symptoms the same, except that the diarrhœa had ceased.

5, P. M. Pulse 116; skin still hot and perspiring.

May 12, 9, A. M. Pulse 96; deafness not so marked; other symptoms the same.

3, P. M. Had a well-marked chill, followed by increased heat of skin, and profuse perspiration.

5, P. M. Pulse 125; face flushed; skin hot; perspiring profusely; delirious.

10, P. M. Skin hot; perspiring profusely.

May 13, 8, A. M. Pulse 84; skin cool and moist; slight tympanitis; *no tenderness on pressure*; tongue brown and dry; no mammary secretion; no lochial discharge; deafness much diminished.

4, P. M. Had a slight chill, followed by increased heat of skin, and profuse perspiration.

5½, P. M. Pulse 116; still perspiring; somewhat delirious.

7, P. M. Pulse 124; still perspiring; somewhat delirious.

12, M. Pulse 128; diarrhoea slight: three or four liquid discharges; passes her urine involuntarily; still perspiring.

May 14, 5, A. M. Pulse 140; much worse; skin cool and moist; no mammary secretion; no diarrhoea; no tenderness on pressure; tympanitis diminished; tongue very dry and brown; no lochial discharge.

9, A. M. Perspiration profuse.

11, A. M. Had a slight chill.

10, P. M. Had a slight chill.

May 15, 9, A. M. Pulse 103; skin cool and moist; no tympanitis; *no tenderness*; no lochial discharge; no mammary secretion; no diarrhoea; tongue brown and dry; still passes her urine involuntarily.

10, A. M. Had a well-marked chill.

6, P. M. Pulse 130; face flushed; perspiration profuse.

8, P. M. Symptoms the same.

May 16, 9, A. M. Pulse 160; had a chill at seven; skin hot and perspiring; face flushed; no lochia; no tenderness; no mammary secretion; no diarrhoea; no incontinence of urine.

6, P. M. Pulse 170; other symptoms the same.

Died at half past 9, P. M.

Autopsy eighteen hours after death. External appearances: no erythematous spots; slight hypostatic congestion of body; tympanitis scarcely noticeable, making inconsiderable elevation of the umbilical region; vagina dry, but having a whitish, varnished look, as if secretion had dried upon it; watery secretion of breasts.

Lungs. Healthy, except apex of left, where there were a few tubercles and a small cavity; no fluid in the pleural cavities.

Heart. Natural size; pericardium and heart structure healthy; slight thickening of aortic valves; others healthy; half an ounce of transparent serum in the pericardium.

Liver. Full size, rather soft, and somewhat fatty at points.

Gall Bladder. Filled with nearly healthy bile.

Spleen. Twice the natural size, and much softened.

Kidneys. Inferior anterior portion of the right, showing somewhat the appearance of fatty degeneration; left presenting somewhat more the color and appearance of fatty degeneration than the right; not strongly marked in either.

Stomach. Membrane of a pinkish hue; markedly mammillated in pyloric half; red with punctate ecchymosis in cardiac half; entire membrane somewhat thickened; gastric glands somewhat enlarged, and of a red color.

Duodenum. Gastric half markedly mammillated; second half somewhat hyperæmic.

Jejunum. Somewhat more vascular than usual; at the lower portion, solitary glands enlarged and distinct (white, as if filled with fluid pus); Peyer's patches begin to be visible, mapped out into sections by irregular whitish bars, running across them variously; passing down ileum, Peyer's patches become more and more distinct, slightly elevated, of a grayish color, but none ulcerated, except the last at the ilio-cæcal valve, where an ulcer existed of the size of a half a dime, looking more like the result of tuberculous than of typhoid disease. (This is an important point. In the opinion of the young gentlemen of the staff this was a simple penetrating ulcer. I state this, because the question might arise whether this ulcer was not of the typhoid fever character.) Solitary glands, enlarged, whitish, and elevated.

Large Intestines. Solitary glands very distinct; membrane otherwise of healthy appearance; mesenteric glands, connected with ileum, moderately enlarged, and red.

Uterus. Blood, fluid, or imperfectly coagulated, in all the large vessels; length, including the neck, four inches and a quarter; width of body, laid open, three inches and a half; on dissecting its connections with left side of pelvis, pus flowed in considerable quantity; pus apparently infiltrated into the tissue anterior to the neck of the bladder, and behind symphysis pubis; several vessels, either lymphatic or venous, in the substance of the organ, contained some purulent fluid; from the seat of the purulent deposit, in appendages of left side, a lymphatic vessel or vein was traced upward to the top of fundus, enlarged, and filled with pus; three or four small abscesses in broad ligament of the left side, one communicating with the vessel just referred to; in two others, no such communication could be found; the veins of uterus, in neighborhood of placental attachment, nearly all filled with coagula.

The enlarged sac just outside the valvular mouth in one instance enlarged and filled with pus. One or two small accumulations of purulent matter in tissue of uterus just without its inner surface.

Inner Surface. Itself covered with a somewhat flocculent fibrinous exudation; stained of a deep brown, almost of a black, color, by a fluid of a creamy consistence and of the same hue, which covered the whole inner surface. The quantity of this fluid retained in the uterus from four to six ounces; it contained pus.

Neck. Same color as the body; tissue somewhat softened; remains of placenta still attached.

Fallopian Tubes. Contained pus; very red.

Ovaries. Nothing noticeable.

Here is a case in which all the symptoms on which reliance usually is placed in the diagnosis of puerperal fever, were absent at the commencement. No chill, no headache, no pain in abdomen, no rapid rise in the pulse. In fine, there was no well-marked period of invasion, such as we have been taught to expect in that disease. The first symptom that is noticed is the diarrhœa, and that occurred on the fourth day. In ordinary peritonitis, the bowels are constipated, but in this class of cases the bowels either are loose or easily moved by medicines. The whole disease is marked by its *gradual* progress; the characteristic point is the recurrence of the chill and the long perspiration that followed the chill, or of free perspiration without chills. So regular was this in the case just read, that I expected, and almost invariably found, my patient in a perspiration when I made my daily visit.

I wish to call particular attention to the condition of the solitary glands of intestines in this case. They were swollen, filled with a milky fluid apparently, and stood out on the surface of the mucous membrane, in certain parts, like pustules, as they often do in small-pox and cholera. I have been induced, lately, to attach importance to this lesion and its connections with pyæmia, having met with it frequently during the epidemic here described; and in some cases of purulent infection unconnected with the puerperal state. Dr. Heywood will recollect such a case; one that we examined together a few days ago. The Peyerian patches also participate in the diseased action in some of the cases.

Thus, the analogies of this case all ally it to common purulent phlebitis. Such it undoubtedly would have been considered, had it occurred in any other than the puerperal state, or even in this state, perhaps, if it had occurred alone. But its associations are no less important the disease itself. It occurred at the end of a series of eleven cases, four of which had the peritoneal inflammatory lesions, and six appeared to suffer mainly from uterine phlebitis and pyæmia. Nine of the other ten cases occurred between the second and the twelfth of April. These cases have been recorded for me by Drs. McEwen and Buist, of the hospital staff. [They were too long to be read before the Academy, but the following synopsis of them has been furnished to the reporter, with remarks.]

CASE II.—Jane C.; delivered March 27; time of attack uncertain, within three or four days, insidious; no chill, or marked rigors; no general abdominal tenderness; circumscribed tenderness in hypogastric region; prostration; pulse 120 and upward, without force or volume; green vomiting.

April 6. Skin hot; face occasionally flushed; no constipation; no secretion of milk; tympanitis inconsiderable; death on the tenth day after delivery, April 7, and on the fourth or fifth, probably, of the disease.

Lesions. Lymph, pus, and serum on intestines and uterus, and in the cavity of the abdomen. Internal surface of uterus stained to an appreciable depth of dark brown or pale pink hue, covered by a reddish brown, pasty effusion, consisting of blood, plastic cells, and fibres, and epithelium; veins and lymphatic vessels did not appear to contain pus; stomach and mucous

membrane pale, thickened, and mammilated; tympanitis, even after death, inconsiderable.

Remarks The women who are attacked by puerperal fever are sent to the general fever wards as soon as the disease can be recognized; and it often happens that the lying-in wards and the fever wards are in charge of different attending physicians. This was the case in April, when this and the other cases here reported, occurred. This case was not transferred, and Dr. Clark did not see it until time of the *post-mortem* examination. The evidence of peritonitis, at the autopsy, were of the utmost marked character; yet, the physician who treated the case is confident that there was no pain in the abdomen, or tenderness, except as described above.

CASE III.—Magdalena M., delivered March 28, after an easy labor.

April 8, eleven days after, was found with a pulse of 140, hot skin, and slight tenderness over uterus. Pulse fell to 72, and tenderness disappeared after a few hours' use of sulph. morphinæ ($\frac{1}{2}$ gr. every hour.) Same symptoms repeated after four days, with tympanitis; no chill; free perspirations first and second days after apparent renewal of attack, slight afterward; abdominal tenderness on second day; *no pain complained of*; vomiting fourth day; bloody vaginal discharge; pulse 116 to 160; death twenty-first day after delivery, tenth after first symptoms, and sixth after renewal of attack. Transferred to fever wards April 12, 7, P. M.

Post-mortem appearances. Tympanitis very considerable; peritoneum covered with plastic effusion; eight ounces of milky serum in abdominal cavity; inner surface of uterus covered by a red diffuent exudation, containing pus; mouths of sinuses patulous; inner layer of fibres stained reddish; no pus seen in veins or lymphatics; pus in vesicles of right ovary; mucous membrane of stomach injected and thickened; pyloric portion mammilated; intestines ecchymotic in spots; Peyer's patches elevated; incipient gangrene (!) of left lung.

CASE IV. Hannah C., delivered, April 21, 1857, at 8, P. M., after an ordinary labor; membranes somewhat adherent; pulse, immediately after, 110, next morning, 118; at 6, P. M., tenderness on right side of uterus; pulse 140, and, at midnight, 160.

April 23. Tenderness over whole of abdomen; tympanitis marked; vaginal discharge, dark, bloody; tongue dry; no milk; pulse 140 to 180; decubitus dorsal; legs drawn up; in afternoon, sweated profusely for some hours; died at 4, A. M., April 24, two days and eight hours after delivery, and thirty-four hours after disease was recognized; no chill; patient was supposed to have albuminuria; transferred, sixteen hours before death.

Post-mortem appearances. Tympanitis considerable; shreds of lymph on peritoneal surface, here and there; a few ounces of turbid serum in its cavity; capillary injection noticeable, but not extreme; evidences of inflammation only slight; pus in the external layer of uterine veins and lymphatic vessels, also, in those of the broad ligaments; inner surface covered with a somewhat firm, mammillated layer of yellowish exudation; color of inner fibres of uterus, bright pink; ovaries inflamed; some vesicles enlarged, and

contained whitish fluid; punctate ecchymosis of mucous membrane of stomach; in some of Peyer's patches, vesicles enlarged, containing a purulent-looking fluid; injection of the valvulæ conniventes; fibrinous exudation at the vulva.

CASE V. Harriet Q., delivered, April 10, after a labor of twenty-eight hours' duration, by forceps; pulse excited from the time of the labor, 110 and upward, quick and irritable; skin hot, and respiration frequent; second day, pulse 120; pain on pressure over hypogastric region, and extending upward; tympanitis; vaginal discharge, second day, of dark color; third day, offensive; tympanitis became extreme; tenderness mostly confined to hypogastric region; no pain; free perspirations, from the fourth day onward; dry, brown tongue, and involuntary evacuations on fifth day, and after; delirious on eighth day; pulse 100 to 136; suppurative inflammation of parotid on sixth day; chill on seventh; death on tenth day after delivery; transferred, April 12, 7, P. M.

Lesions. Tympanitis extreme; no inflammatory effusions of any kind on intestines, or in abdominal cavity; pus and fibrine on the inner surface of uterus; muco-purulent fluid in fallopian tubes; pus in right parotid gland, and in tissues, just anterior to vagina; local congestions of mucous membrane of intestines; pyloric extremity of stomach mamillated and thickened; pure pus discharged from vagina; kidneys dotted over with small, yellowish, white spots, which, on microscopic examination by Dr. Draper and self, separately, were found to consist of pus.

CASE VI. Ann W., delivered, April 7, 1857, after an ordinary labor.

April 9. Colicky pains; bowels constipated for past five days; pulse 96; cheeks flushed; no chill; (bowels relieved.)

April 10. Some tympanitis; countenance anxious; pulse 112; skin hot; face flushed; afternoon, green vomiting.

11th. Free perspirations at night.

12th. Vaginal discharge ceased, then returned, of dark color, not offensive; tympanitis continues; slight tenderness over uterus; mind wandering.

18th. Vaginal discharge, profuse and offensive.

From 13th to 23d. Frequent and free perspirations; occasional green vomiting; tympanitis remaining, but not extreme; bowels, at first, slow, afterward, too free; mammary secretion scanty; occasional delirium; skin at times dry and hot; vaginal discharge becoming light yellow; tongue alternately brown and dry, then moist; pulse, restrained by medicine, 88 to 128; tenderness in hypogastric region remaining, but not markedly increasing; strength diminishing.

April 23. Tympanitis nearly gone; tenderness remaining.

24th. Tympanitis returned; death on the afternoon of the 25th, after fifteen or sixteen days' illness; transferred, April 10.

Lesions. Large peritoneal abscesses filling pelvis, and rising as high as the level of superior spinous processes of ilium, shut in by adhesions of the intestines; no general peritonitis; abscesses in both broad ligaments, one of which had opened into peritoneal cavity, and communicated with large abscess; others just ready to open; fibrinous and purulent effusion on inner

surface of uterus; three sloughy ulcers in rectum, opposite large abscess; mucous membrane of stomach purplish, thickened, and most of it mammillated; follicles of jejunum distinct.

The patient who is the subject of the following report, was lying in the same ward, and was seized at the same time, with two others, whose disease terminated in five and nine days, respectively, one, No. 2, of this series, presenting the usual peritoneal lesions; the other, No. 11, was supposed to have had metro-peritonitis, but the opinion was not verified by an autopsy. This circumstance, as well as the interest with which the case was watched during its progress by physicians not attached to the hospital, may, perhaps, render a synopsis unsatisfactory, and justify the unusual length of the record. The history was kept by Dr. Buist.

CASE VII. Mary Ann Fay, æt. 17 years; of rather delicate constitution; was admitted into the lying-in wards of Bellevue Hospital, March 11, being in her first pregnancy. On April 2, at 10 o'clock, A. M., she gave birth to full-grown living child, after a natural labor of some twelve hours' duration; the placenta was expelled in ten or fifteen minutes after, and the uterus contracted firmly. During the evening of the same day she complained of slight pain, and tenderness on pressure, in the right iliac region. The day following, the lochia appeared, and were reported in all respects natural; tenderness remained the same; no chill had occurred, but the pulse was frequent, and she did not appear well; on the 4th, the pain and tenderness had almost subsided, wet cups and a turpentine stupe having been applied the day previous; heat of skin and irritability of pulse became quite marked; lochial discharge was somewhat offensive; she was slightly nauseated, but did not vomit; there was only a moderate secretion of milk; and she showed much languor and feebleness; during the 5th, 6th, 7th, and 8th, she continued very much in the same condition, with a pulse averaging 130; a flushed face; respiration about normal; the lochia entirely ceasing. On the evening of the 8th, being considered a case of puerperal fever, she was removed from the lying-in department to another ward; up to this time, she had taken but a very small amount of opiates, with a few doses of calomel a day or two after delivery. (When the woman was sent to the fever ward for treatment, and from the day before, when Dr. Clark first saw her, her condition was regarded as hopeless, and no active treatment was adopted; she was looked upon as one already fatally pyæmic, but, surviving thirty-six hours from her transfer, she was put upon quinine and brandy, etc., which were continued till the secondary meningitis began.)

April 8. Quite feeble and languid, but in no pain; bowels confined, and excessively tympanitic; tongue dry, and coated slightly; cheeks flushed; pulse 140 to 144; respiration 15 to 20 in the minute.

April 9. Feels comfortable and disposed to dose; gets one ounce brandy every two hours, and beef tea; has eaten an egg; no vomiting.

9, P. M. Sweating profusely; tongue more moist; sleeps occasionally; bowels confined; is in no pain whatever.

April 10. Sleeps well toward morning; pulse very weak; tongue dry and tremulous.

7, P. M. Sleeping; has passed urine in bed; pulse 150 to 156; stimulants to be increased, with the addition of sulph. quinine.

April 11. Bowels moved at 7, A. M.; stool dark and semi-fluid; pulse, through the day, 152 to 136; respiration 16 to 18.

April 12. Skin hot and dry; tongue dry and tremulous; one copious stool, natural; pulse 130 to 136; takes now about ten grains of quinine, in one or two grain doses, daily, and of brandy half an ounce every two hours; also, morphine in small doses.

April 13. Appetite returned; tympanitis much diminished; tongue moist and clearer; skin quite comfortable; looks better; pulse 130 to 136. Stimulants and nourishment constantly kept up, quinine as before and morphine one-sixteenth of a grain every three hours.

April 14. Although extremely weak and prostrated, her condition seemed more favorable than it had been; the pulse ranged in the neighborhood of 130, and was feeble and irritable; bowels rather too open; the tympanitis entirely gone; she complained of some sore throat, and coughed occasionally; morphine was now exchanged for pulv. opii, ten grains daily, and port wine was given as well as brandy. From the 14th to the 26th, her strength has very gradually increased, though not yet able to sit up alone in bed; the pulse has changed but little, one day being at 116, the next at 140; her cough had grown much more frequent and troublesome, attended with some muco-purulent expectoration; about the 16th, physical examination gave a crackling over the whole chest and the commencement of pulmonary abscesses was thought probable. She has had night sweats most of the time, though they have not always been profuse. The bowels have sometimes been quite free, the stomach has become able to digest farina, arrowroot, etc., the morphine has been gradually withdrawn and quinine and brandy have been freely given.

April 29, 5, P. M. Pulse 136; respiration 26; cough very troublesome, but without expectoration; bowels rather free; tongue moist and coated in patches; lips and hands tremulous, she is more feeble than usual; continued to take twelve grains of quinine and six ounces of brandy, and eight ounces of port, daily.

9, P. M. Pulse too rapid and feeble to be counted; respiration 48; half an hour ago, she complained to one of the patients of pain in right side near the region of the liver; is found moaning and sighing much; has a sharp pain on deep inspiration, and much tenderness on pressure over a considerable portion of right hypochondrium; no vomiting; no tympanitis.

11, P. M. Pulse 160; respiration 48; seems easier; coughs constantly.

April 30, 6, P. M. Pulse 160, or over; respiration 36.

12, M. Began to take one-quarter grain morphia every second hour, which made her apparently more comfortable.

From this time till her death, which occurred May 3, the sweats continued; the pulse was sometimes 160, sometimes 140; the respiration at times 36 and 40, at other times 28; the tongue was oftener dry than moist, and her little remaining strength gradually failed. On the first of May, she began to complain of some pain in the right side, and there was some tympanitis; on the second and third she kept her thighs flexed on the trunk, and the tympanitis increased. She became somewhat delirious, with frequent moaning and sighing, and she passed into incomplete coma, in which state she died.

Post-mortem twenty-five hours after death. External appearances

Moderate tympanitis, no erythematous spots; discharge from vagina sanious; rigor mortis as usual.

Abdomen. Moderately inflated with gas; no vascular congestion, except in dependent portions of large and small intestines; no serum; no pus; no recent lymph; no adhesions except of colon to liver, and of duodenum to left lobe of liver. These adhesions were as firm as the original tissues, consequently more than a month old; therefore, no evidence of peritonitis during late sickness; no evidence of inflammation in right iliac region; solitary glands of duodenum slightly elevated; mucous membrane somewhat vascular; glands of ilium very distinct and opaque; Peyer's patches not visible.

Lungs. Bronchial tubes red; considerably congested, containing bloody mucus; bronchial glands enlarged; posterior portion of each lung cedematous, a few military tubercles in right lung; moderate sized masses in left, more abundant than in right; lungs softened; no secondary abscesses discovered.

Stomach. Mucous membrane rather opaque; numerous ecchymotic spots on cardiac portion, and some over pyloric and mammillated.

Liver. Soft, of natural color; several whitish spots, of small size, upon its surface; veins open and apparently healthy, yellowish spots about the size of the lobules of Kiernan, and somewhat seen in the interior.

Spleen. Not enlarged; rather soft.

Kidney. Rather small; vascular, but apparently healthy; in pelvis large veins filled with fluid blood, lining membrane not blood-stained.

Uterus. Reduced to three inches in length by two inches and a half in width; walls thin and looking somewhat granular; inner surface covered with bloody exudation, of dark hue, outside of which was a grayish granular fibrinous deposit; a little milky muco-purulent matter in right fallopian tube.

Fallopian Tubes. Congested.

Ovary. Several large graafian vesicles, containing fluid, opaque.

Brain. Vessels of dura mater somewhat injected, of pia mater, moderately; arachnoid raised from brain by a considerable effusion of transparent serum; also dotted with several irregular opaque spots; convolutions prominent and deepened and widened at vertex; several deep indentations made by the effused serum; a little serum in the ventricle, otherwise healthy; about four ounces of serum in the cavity of the brain.

No pus found in the knee-joints; nor any appearance of such deposit in other joints; posterior to right breast a small collection of purulent matter.

Heart. Of natural size, valves healthy, lining membranes not blood-stained, contains no blood.

The striking features of this case, is, that after the subsidence of the tenderness and tympanitis, on the 12th and 13th of April, there was no corresponding diminution of the frequency of the pulse, and but a limited improvement of strength. Her appetite was but imperfectly restored, and yet, she ate enough to sustain life till the last day or two. Her sweating was extraordinary; for two weeks past, there has hardly been a day when at the hour of the attending physician's visit she had not been sweating profusely, and that visit has been made at times, varying from half-past 9, A. M., to 5, P. M. She always spoke of herself as doing well, "first-rate," when it seemed as if she must have been exhausted by the perspiration. Her tongue during the last fortnight, though sometimes moist, has been commonly dry, and frequently there have been sordes on the teeth and lips. Every day or two there was a recurrence of the green vomiting. The vaginal discharge it was reported had ceased, but when searched on the day before her death, it was found that there was still a little pus at the vulva. That the pulse did not improve with the other symptoms, was constantly forbidding the hope of recovery.

For the last three days of life, there has been some increase in the frequency of the pulse. For three weeks past, it has been the conviction that the patient was suffering from some secondary purulent deposit, and it has been an object of almost daily search, to discover its seat. When the cough began, the attending physician was prepared to see the evidence of it in the lungs, but the expectoration of purulent matter was never abundant enough to confirm such a conjecture. When there was tenderness over the liver, it occurred to him that that organ might have become its seat, but there were no inequalities on its surface, and there was no jaundice. The *autopsy* itself failed to demonstrate any considerable deposit of this product; none could be found in the cavity of the abdomen, none in the lungs or brain, or gluteal region, or knee-joints, or either iliac fossa, or pelvis, or in the kidneys. In the liver were certain yellowish-white spots as large as the lobules of Kiernan, or larger, reserved for microscopical examination. Suspicious looking glands were noticed, anterior to and between the great abdominal vessels, and in the extremities of the broad ligament, also, one or two between the bladder and uterus; and there was a small collection of pus behind the right breast. Beyond this there was no pus discovered by the unaided eye, after diligent search. There was universal bronchitis, to account for the cough. The solitary glands in the duodenum, and in part of the ileum, were very large and apparently filled with pus, while the mucous membrane of these parts was thickened, and that of the duodenum very irregularly, but vividly vascular. This would probably account for the diarrhoea. The brain, or rather meninges were the seat of secondary inflammation, to explain the concluding symptoms.

But to account for the frequent pulse for thirty consecutive days, there was nothing but a fluid state of the blood, and the suspicion that it was contaminated by pus. The uterus still contained the evidence of an exhausted endo-metritis, and of little other disease. The peritoneum was free from all marks of inflammatory disease, either recent, or within a month of death. The mucous membrane of the stomach was thickened; the pyloric portion mammillated, and all the other portions thick-set with punctate ecchymosis. Here was probably the explanation of the vomiting.

The foregoing cases are those which had a fatal termination. Of the seven, three presented the lesions of peritonitis, viz., Nos. 2, 3, and 4. None of these were subjected to the systematic opium treatment. No. 2 was not seen by me during life. No. 3 came under my charge after the disease had made insidious progress for four days, having apparently yielded at first to a few half-grain doses of morphia. No. 4 was a rapid case, and ran its course during my temporary absence from town. I witnessed only the autopsy. The other four, it can hardly be doubted, were cases of purulent infection. The three following are cases of the same nature, unless Case No. 10 should be regarded as one of doubtful diagnosis. These three recovered.

CASE VIII. Margaret B.; labor of twenty-one hours' duration; delivered, April 3, 1857.

April 10. Vaginal discharge became scanty, and somewhat foetid.

12th. Some diarrhoea; secretion of milk, till now copious, greatly diminished; skin hot; countenance anxious; no chill; no abdominal pain or tenderness; from delivery has not gained strength, and pulse frequently above 100; now 120 and upward; perspiration at night.

13th. Green vomiting very troublesome; sweating in the morning; pulse 112 to 68, under influence of medicine.

14th. Sweats again in the evening; tympanitis; pulse 88 to 116.

15th. Tympanitis increased; pulse at or near 100; vaginal discharge light yellow.

16th. Pulse 104 to 81; average lower than yesterday; vaginal discharge ceased; appetite and general appearance improving.

17th. Pulse reduced, 96 to 76; still vomits; tympanitis continues; general condition better.

18th. Pulse variable, 96 to 76; vaginal discharge returned, and of dark color; tympanitis diminishing; no tenderness.

19th, 20th, and 21st. Still improving.

24th. Bowels moved for the first time spontaneously.

26th. Sitting up; feels well; appetite good; abscess of the breast began during convalescence; discharged, cured, May 22.

Treatment. Tinct. veratrum viride and sulph. morphiæ together, from the 12th to the 17th; after that the morphia alone.

CASE IX. Mary S.; labor natural; duration, five hours and three-quarters; delivered, April 6; chill followed by tenderness in the hypogastrium; frequent pulse, hot skin, and restlessness twenty-four hours after.

8th. Pulse 134; pain and tenderness in hypogastrium.

9th. Under the influence of tinct. of veratrum viride and morphia; pulse fell to 84, even to 60, 58, and 56; still tenderness marked; spontaneous stools; vomited frequently; some mammary secretion; considerable pain over whole abdomen, and in the breasts.

10th. Symptoms nearly the same; vomiting has become green; pulse 58 to 96.

11th. Green vomiting; somewhat delirious; tenderness over uterus, and in right iliac region, has increased; tympanitis; free perspirations.

12th. Tympanitis increased; vaginal secretion scanty; tympanitis diminished, and uterus can now be felt, very large and tender; pressure on it pro-

duces hiccough, as also, on the whole abdomen; perspirations; some appetite; pulse 58 to 78; at night, severe pain in hypogastric region, and in direction of right ovary; tendency to hiccough.

13th. Some pain and tenderness; perspirations; restless; vomits; still some appetite; pulse the same; evening, profuse sweats.

14th. Perspirations more profuse; mammary secretion scanty; vaginal discharge, light yellow.

15th, 16th, 17th and 18th. Pain and tenderness had diminished; pulse 80 to 104.

18th. The mammary secretion returning; the last three days, profuse and nearly uninterrupted sweat; vaginal discharge still light yellow.

19th, 20th, and 21st. Improving in strength and appetite; still sweating profusely, day and night.

21st. Hæmorrhage from uterus.

22d, 23d, and 24th. Still these extraordinary sweatings, almost without interruption; takes quinine and brandy, and improves daily.

26th. No sweating; uterine tumor much diminished; feels well; appetite good; sat up for the first time; eight or ten days later, was discharged cured (May 4.)

Treatment. Tinct. of veratrum viride and sol. sulph. morphinæ; after the sweats commenced, sulph of quinia, brandy, and food. The veratrum viride controlled the frequency of the pulse with great certainty, but had no influence over the pain. This was subdued by morphine.

CASE X. Julia K.; labor, very protracted, second stage lasting sixty-two hours; delivered, April 11, 1857.

April 12. Toward morning, had a slight chill; at 10, P. M., pulse 140; skin hot; tympanitis; no abdominal pain or tenderness.

13th. Vomiting of acid, colorless fluid; bowels moved by castor oil; pulse 132 to 112.

14th. Pulse 116 to 108; skin, for most part, cool and dry.

15th. Vaginal discharge, light yellow; skin dry; at 9, P. M., slight perspiration, for the first time, pulse going up from 96 to 116.

16th. Pulse 112 to 86; mammary secretion scanty, and has been.

17th. Pulse 92 to 80; tympanitis and vaginal discharge the same.

18th. Tympanitis diminishing; pulse 88 to 64.

19th, 20th, and 21st. Pulse, average, about 70; improving.

22d. Bowels moved, for the first time, spontaneously.

26th. Sits up; abscess of right breast beginning, April 26, attended by free suppuration; discharged, cured, May 4.

Treatment. Sol. sulph. morphinæ, and, for the first twenty-four hours, the tinct. of veratrum viride.

Another fatal case is to be added to this list, but as a *post-mortem* examination could not be obtained, and the lesions, therefore, cannot certainly be known, it is thought better to separate it from both the classes here recognized, and present it alone.

CASE XI. Catharine F., delivered, April 1, at half-past 8, P. M., of a

still-born child, after a natural labor of about twelve hours' duration; two days after, very nervous and excitable, but made little complaint; pulse about 130; camphor and Dover powder were administered with some relief.

No notes have been preserved of this case, but it is remembered that, from the 3d to the 10th, she had at first constipation of the bowels, and that this was followed by a profuse and troublesome diarrhœa; that she grew weak pretty rapidly; that the pulse continued very frequent; that she sweated freely, and did not sleep at night; that she did not complain of pain in the bowels, and had little or no tenderness; that she had pain in the position of the breasts; that it was found that the right breast was congenitally deficient; and that there was only moderate tympanitis; in the latter part of this period, the sweats were profuse, and she vomited freely (character of vomit not remembered); on the evening of the fourth, she was transferred to the fever wards; pulse then 160; extreme irritability; great tympanitis; grew weaker during the night, and died on the morning of the 12th; no autopsy allowed.

The history of these cases will not be complete till certain facts relating to their mode of occurrence, and their association one with another, are recited. During the months of January, February, and March, the physicians attending the lying-in patients, often spoke of the frequent occurrence of abscess in and about the pelvis, after labor. A death from metro-peritonitis is recorded in the hospital books, occurring on February 26; another on March 11; and on this latter day a death from peritonitis, all in persons recently delivered. The number of women delivered in the institution, during the month of February, was twenty-nine; during March, twenty-five.

Nothing was noticed in the lying-in wards to excite apprehension, from March 11 to April 2 or 3; from that date, three of the cases here narrated, took their origin, viz., No. 2, a case of metro-peritoneal puerperal fever; No. 11, probably of the same character; and No. 7, one of purulent infection, it will hardly be doubted, without peritonitis. Of these, one was delivered on March 27, and the other two on April 1 and 2. Nine women were delivered between March 27 and April 1; three of whom fell sick, and two of whom had well-marked peritonitis, and the other was supposed to have had the same affection, (Nos. 2, 3, and 11,) all of whom died. From the 2d to the 7th, inclusive, five women were delivered, four of whom fell sick, all with purulent infection and without peritonitis, (Nos. 6, 7, 8, and 9,) of whom two died and two recovered. From the 8th to the 12th, five were delivered two of whom took the sickness, (Nos. 5 and 10,) of these one recovered, the other died; neither had peritonitis.

On the 12th, the women waiting to be confined were all removed from the lying in wards; new wards were opened in a distant part of the building, and the physicians, nurses, and furniture were entirely changed; *women who had been waiting in the lying-in wards were not admitted into the new wards*, but were sent to other wards in the same wing; there were eight in number. The lying-in wards were soon completely emptied; Dr. Lee, and his assistant, Dr. Buist, who had the charge of the lying-in wards thus far, still retained the care of the eight sent to other wards in the wing. These eight were delivered one after another, during the next three weeks, and one only took the disease, (No. 4); she was delivered, April 21, and attacked the next day; she had puerperal peritonitis, and died.

The newly-opened lying-in wards were filled by women who had been

waiting in a building detached from the hospital proper, and who had had no intercourse with the old lying-in wards; these and the newly-received patients were sent to the new wards. From April 13 to May 1, ten women were delivered in these wards, all of whom did well, except Clara Byrne, (Case 1); she was delivered on April 26; the young physician then in charge of the wards had seen none of the cases that had previously occurred, and as has been said, the nurses and furniture, as well as the physicians, were all new and uncontaminated. On May 2, one of the house physicians, who up to ten days before had studied the previous cases, and had attended most of the *post-mortem* examinations, took charge of these wards. During these ten days, he had carefully avoided all sources of contamination, to fit himself for his turn of obstetrical duty, which now commenced; whether this change of physicians had any bearing on the development of the disease in this instance, must be determined, if determined at all, by an examination of the case as it is recorded. It is pertinent to add that, during the month of May, this physician delivered twenty-three women in these wards, none of whom had fully developed puerperal fever, in either of its forms: while several had, for many days, very threatening symptoms, which excited his fears and those of the attending physician that the disease was not wholly eradicated.

Whether this form of phlebitis should be considered a form of puerperal fever may admit of discussion, but it certainly appeared in an epidemic form, as puerperal fever often appears; it spread, as puerperal fever spreads under like circumstances; and was checked by the same means that are relied on in hospitals for checking puerperal fever; while it occurred in the midst of, and at the same time with, cases, which no physician will hesitate to call puerperal peritonitis, if not puerperal fever.

One case more will complete this branch of the subject, and it is offered to show that this form of phlebitis is not confined to hospital practice, and may be sporadic. A young woman gave birth to a child at a station-house, May 9, 1857. On the 12th, she was admitted to the Bellevue Hospital, sick; she had tenderness over the uterus, and some tympanitis; the vaginal discharge was abundant, dark, bloody, and very offensive; tongue furred, but moist; bowels confined; no mammary secretion; pulse 110. There was little change in her condition for one week, when the tympanitis subsided, and the tenderness over the uterus diminished; while the lochia became less offensive, and more natural, and there was some milk. She had, however, had moderate perspirations for the last few days; from about the 17th to the 25th, the sweats formed the prominent feature of her disease, they were profuse and prolonged, and frequently repeated. Her pulse was, however, but little excited, and her countenance and spirits were good; after this, the sweats diminished in severity and frequency, but on the 3d of June, an abscess commenced in the right breast, which was opened on the 8th, discharging a pint of fetid pus. It is still under treatment by pressure, (June 17,) discharging from 3i. to 3ss. of pus daily; the woman's general health is nearly restored, she had profuse night-sweats from the 8th to the 12th, and these have now subsided.

Thus, of the four cases that survived this phlebitis, three had, during convalescence, abscess of the breast; and the exceptional case was discharged from the hospital before the abscess occurred in two who were attacked about the same time with her.

Fatal cases of this endo-metritis and puerperal phlebitis, (it may receive the last of these names, even if it is not admitted among the forms of puerperal fever,) came under my notice during the last winter, in private practice.

[Dr. Clark presented a tabular arrangement of the symptoms in nine cases of puerperal fever, attended by peritonitis, and also in five cases without peritoneal inflammation. His remarks on this branch of the subject, will be given in our next number.]

Prof. Barker said: The subject is one of great importance to every obstetrician, and in this country every practitioner is an obstetrician. The subject as announced is, "the contagiousness and treatment of puerperal fever," and the question must turn on the pathology. What is its essential character? Is it a local phlegmasia; or, is it a zymotic disease? I had the pleasure of being present the first evening, but being unfortunately absent the second evening, I have read with great care, the remarks of Prof. Clark, as reported in the N. Y. Journal of Medicine. I have been deeply interested in his remarks this evening, and feel greatly indebted for his researches and contributions to the morbid anatomy of the disease in question. But has this disease an anatomical character? If I understand him, it has, consisting of four primary lesions, viz., inflammation of the peritoneum; inflammation of the veins of the body of the uterus; inflammation of the lymphatics of the uterus; inflammation of the inner surface of the uterus or endo-metritis, which he considers to be in fact a limited phlebitis.

Now here, with all due respect, I am compelled to differ from him, having been accustomed to regard these lesions as being the relation of an effect, instead of a cause. I have believed that there was no proportionate relation between the intensity of the symptoms and the amount of the local lesion; I have regarded puerperal fever as a distinct, essential disease, having associated with it most generally, lesions of the peritoneum, or of the veins of the uterus, etc., but I have also believed that we may have peritonitis, or phlebitis, or any other of the local inflammations, even in the puerperal woman and not have puerperal fever. For example, we meet with phlebitis in the parturient woman in three forms: the adhesive inflammation, as in the disease known as *phlegmasia alba dolens*; the circumscribed puriform inflammation, in which little abscesses are found in the substance of the uterus; and the diffuse puriform inflammation, constituting pyæmia. The very interesting case which Prof. Clark has so minutely detailed, if met with alone, seems to me to be one of pyæmia, rather than a case of puerperal fever.

(To be Continued.)

EDITORIAL DEPARTMENT.

The New York State Medical Society, and Medical Fees.—The late decision of Judge Marvin, of the Supreme Court, in the case of Dr. Hill, against the Erie County Medical Society, is one affecting the interest of the profession of the entire State, although originating in action had by a local society. It has been the interest of those who have prayed for the defeat of our county society, to represent that the action was purely sectional, instigated for the purpose of the attainment of personal ends, and—that it was very doubtful if the subject were brought to the notice of the State Society, whether it would sustain the course of the County Society.

The recently published volume of the Transactions of the State Medical Society, at its annual session, held at Albany in February last, exhibits the fact, that the State Society has not deemed it beneath its notice or dignity, to speak out upon the subject of the inadequacy of the compensation paid for services rendered to the public. We propose to copy from the Transactions, all that refers to this subject.

From the inaugural address of the President, Dr. Alden March, delivered on the first day of the session, we make the following extracts:

"It is also thought proper to call the attention of the society to the consideration of another subject—one in which some of my constituents, and I doubt not many of the members of this honorable body, feel a deep interest. I refer to the services physicians and surgeons are occasionally called upon to render to the county, under the direction of coroners, in making post-mortem examinations by dissection, in cases where murder is suspected. I need not advert to the necessity of having a properly qualified medical man to make such examinations—to the time spent—to the risk of life and limb; and to the responsible and vexatious position in which the witness is often placed

before a court of justice. We do not wish to give the public the impression that our profession is mercenary—that we are too much influenced by pecuniary reward. You, as well as the whole world know, that physicians and surgeons are more heavily taxed in taking care of the poor, than any other profession, trade, or calling.

"Most certainly 'the laborer is worthy of his hire.' The Medical Society of the County of Albany, not long since, resolved to be no longer imposed upon, or insulted by the supervisors, by having a reasonable charge for post-mortem dissections, cut down to the pay of an ordinary day laborer. The following is the rate of charges for such services, agreed upon at a special meeting of our society, held in December last;

"For making post mortem examinations with dissections in criminal cases, where person is committed and tried, from \$15 to \$50.

"For making post-mortem examinations with dissection, to ascertain cause of death when crime is suspected, \$10.

"For examining bodies and testifying as to cause of death, without dissection, \$5.

"For making examination and giving certificate under oath in cases of insanity, \$3.

"I find that this subject, as well as those that relate to professional services and attendance on the inmates of almshouses, jails, work-houses, &c., was brought before this Society in 1850, by Prof. James P. White, of Buffalo. On that occasion it appears that the following resolutions were unanimously adopted:

"1st. *Resolved*, That this Society recommend the several County Societies to arrange a minimum tariff of prices for those several offices and services within their limits, which, whilst it shall afford a reasonable compensation for the attention bestowed, shall at the same time be so much only as will meet the approbation of the more reflecting members of community, and so low as to afford no reasonable excuse for its infraction.

"2d. *Resolved*, That it shall be considered derogatory to the character of any member of the profession to violate any such bill or tariff of prices by underbidding when it shall have been regularly adopted by the Society of the county in which he may reside."

"This subject has been thought of sufficient importance, and of a character so general, as to demand the attention of the Society. But whether by any definite action or otherwise, will be for the members to determine."

Immediately succeeding the address, on the motion of Dr. Saunders, of Schuyler County, the following was adopted:

"Resolved, That a committee of five be appointed to take into consideration so much of the President's opening address as relates to post-mortem examinations before coroners, and the charges for the same, and that they report at this meeting."

We judge that the committee referred to in the resolution, was not appointed, as we do not find their names in the minutes of the proceedings; but in the transactions of the next day's afternoon session, we read as follows:

"Dr. Crandall presented the following, which was adopted:

"Whereas, It is a well-known fact that in the prosecution of criminal justice, members of the medical profession are often required to leave their homes and their business and attend for days, and sometimes even weeks, upon the courts, to give their testimony in cases of which they have no personal knowledge, being called solely as medical men to give professional opinions and conclusions founded upon the evidence which may be adduced in the legal examination. In this way the physician is often forced away from his legitimate business to his own disparagement, and not unfrequently to the serious neglect of the sick depending upon his daily ministrations. We consider this expensive and unrequited labor a serious and oppressive tax upon the medical profession, and one which is occurring so frequently that it calls loudly for legislative address; therefore,

"Resolved, That the practice of medicine is attended with peculiar toil, self-sacrifice and responsibility, and that while the medical profession acknowledges its obligation to meet all the just demands upon it of the community, it would also claim a reciprocal obligation to be relieved of all unreasonable and unnecessary burdens.

"Resolved, That the professional skill and knowledge of the physician is his own, having been purchased at the expense of many anxious and toilsome hours, and the liberal outlay of his means; and if it be worth anything to others, it should also be valuable to himself, and the public have no more right to claim its gratuitous employment than that of other professional men; and if the member of the bar is permitted to make a public charge for his services in prosecuting or advocating a criminal case, the physician who is called upon to give professional opinions and the results of professional experience in the same case, ought also to claim redress in the same way.

"Resolved, That physicians throughout the State and the various medical societies, should unite in petitions to the Legislature for such an enactment as shall provide a sufficient remuneration for the services and knowledge of the physician when claimed by the courts in the prosecution of criminal justice."

In the proceedings of Thursday morning, the third day of the session, we find the following recorded :

"Dr. Hall presented the following, which was adopted :

"*Resolved*, That this society recommend to the county societies of this State to adjust a scale of fees for all medico-legal services. Also that the Albany County Society's scale be published in the Transactions, as a future guide for others." N.

Meeting of the Medical Society of South Western New York.—The members of the Medical Society of South Western New York, held their *third* quarterly session for the present year, at the society's rooms in Westcott's block, Jamestown, on the 5th Aug. The Society was called to order, at 1 o'clock, by the President, Dr. G. W. Hazeltine, and in the temporary absence of the Secretary, Dr. O. C. Gibbs was chosen *secretary pro tem*.

Several new members were admitted, giving evidence of a growing interest in this young and vigorous society.

Several medical and surgical cases of much interest were presented by Drs. Hazeltine, Axtell, Bemus, and Gibbs, which were examined by the other members present, and discussed with much interest and spirit.

The standing committee on special diseases, asked permission to defer presenting their reports until the next meeting, with the exception of Dr. T. D. Strong, of Westfield, who presented a partial, though very interesting report upon the use of chloroform in obstetrics. Discussion upon this report was deferred for want of time.

At 4 o'clock, the members present, their wives, and invited guests, sat down to a sumptuous dinner prepared by the Messrs. Westcott. A blessing was asked by the Rev. Mr. Norton, after which Doctors, Reverends, Esquires, &c., with their wives, discussed the excellent dinner with seemingly good relish. When the appetite of all was satisfied, the President, Dr. Hazeltine, made a short but appropriate speech, concluding with an excellent sentiment, to which Dr. Washburn responded in a very happy manner. Sentiments were read and responses made, until the shades of evening gave warning that it was time to adjourn preparatory to the evening exercises. The best feeling prevailed, and we are sure none regretted having been present on that occasion.

At 8 o'clock, P. M., the members of the society met in the Lecture Room of the Congregational Church, when A. Hazeltine, Esq., read a Biography of the late Dr. Laban Hazeltine, before a large and appreciative audience; after which the regular address was delivered by Dr. T. D. Strong, of West-field.

The address was able and interesting, doing credit to the lecturer, as well as he to the subject. Dr. Strong discussed the merits of homœopathy with ability and candor, and whatever might have been the previous opinions of any of his hearers, they could not have failed to be interested in the discussion of a question of vital importance to all.

In the first place he quoted largely from the writings of Hahnemann and other distinguished homœopaths, in order to show the foolish and visionary nature of its pretensions. He showed conclusively that the dynamic power, which medicines are claimed to acquire by *dilution* and *trituration*, is an arrant humbug. A drop of laudanum diluted with a barrel of water does not gain strength by the dilution, however much it may be shaken. Physicians have never discovered that paregoric acquired increased soporific powers, or a deadly potency, by being carried about on horseback for weeks previous to administration. In the second place, he showed the loose manner of homœopathic observation, and the unscientific and unreliable nature of the pretended facts upon which the system is based. He quoted from distinguished homœopathic authority to show that they disregard the sciences of anatomy and pathology altogether; treating symptoms only, regardless of the ultimate nature and character of the disease which give rise to such symptoms. In the third place, he introduced facts to show that where homœopathy had been put to the rigid test, under the observation of disinterested persons, as has repeatedly been done in European hospitals, it has, in every instance, failed to produce curative results, at all comparable with regular medicine. In some instances, the homœopaths making such trial have voluntarily retired in chagrin, or been compelled to relinquish their post by the proper authorities. He showed that the reputed success attending homœopathic treatment, in certain diseases, was explainable on the ground of their loose and unscrupulous manner of diagnosis. Thus, in Cincinnati two years ago, homœopaths reported remarkable success in the treatment of cholera, but when their report was investigated by the city Board of Health, it was found they had reported no cases of cholera morbus, diarrhoea, or dysentery: all diseases of a diarrhoeic character were classed with cholera, and all recoveries were reported as cures from that disease. In the fourth place, he showed that homœopaths themselves had but little confidence in their system, for, in

urgent cases, they not unfrequently disregard their theory of increased power by dilution, and administer medicines in full doses.

We have not attempted a full synopsis of Dr. Strong's address, for space would not permit.

At the conclusion of the address, the members of the society returned to their rooms, and continued in session until past 11 o'clock, P. M. They passed resolutions to publish the biography of Dr. Laban Hazeltine, and to increase the utility of the society by lengthening the sessions.

The next meeting will be held at Fredonia, commencing at 10 o'clock, A. M., and continuing through two days.

The number present was unusually large, and the meeting was of the most cordial and fraternal character. The professional duties of the physician impress cares and responsibilities, rarely equalled by any other vocation in life, and it is of good omen that the physicians of South Western New York, are alive to those responsibilities. May the society and its members continue to prosper.

G.

Braithwaite's Retrospect, and Ayer's Cherry Pectoral, and Cathartic Pills.—For three years past one of the pages of the cover of the well-known periodical, *Braithwaite's Retrospect*, republished by Stringer & Townsend, of New York, has been occupied by the advertisements of the two patent medicines manufactured by J. C. Ayers, of Lowell, Mass., and which have been puffed into notice by all the appliances of advertisements, and the full energies of steam presses. These nostrums are now thrust under the very noses of the profession, and almost down their throats.

It required all the impudence of which it is reported that the manufacturer of these two articles possesses, to make the pages of a medical periodical professedly devoted to the advancement of legitimate medicine, the means of extending his sales and increasing the wealth which he is said to have accumulated in their manufacture.

It strikes us, that upon the part of the American publishers of this work, it is rather taking the advantage of the good nature and spirit of forbearance of a profession, which extends to them a generous support in the enterprise in which they are engaged. It is bad enough, to find the daily and weekly secular and *religious* press, engaged in giving notoriety to and puffing every quack remedy of the day. They work simply for money, and justify their course by no other rule of action. The only limits to the boun-

daries which they set for the exercise of their freedom, is that the language shall be so covert as to not too rudely shock the sense of common decency and propriety. Pills to procure an *abortion* find place with those to cure the ague, *provided*, the advertisement of the former pills contains the transparent piece of gammon of advice, "*that ladies in the third or fourth month of pregnancy are cautioned against taking them as miscarriage will be certain to ensue!*"

But medical men have a right to expect and demand that a higher tone of ethics shall govern the publishers of our professional journals. The profession ignores these remedies in all their forms, and it is not in the province of our *book publishers* to question the motives which actuate medical men in their confirmed hostility to the whole class of quack and patent remedies, and it is but little less than an insult, to use the means which their relation to the profession furnishes them, to thrust upon the notice of the latter the puffs and certificates which constitute the greater part of the stock in trade of the venders of these panaceas.

It furnishes no excuse that the formulæ of the remedies are given, as is the case of the two articles under special notice; this is merely one of the new tricks of the trade introduced comparatively recently. It is only a means proposed for making the profession the agents and venders of these articles. Moreover, we say, with these two receipes before us, that if any regular practitioner of medicine cannot make an *extemporaneous* prescription calculated to meet all the indications of a case, which would be covered by either or both these remedies, he deserves to be *drummed* out of the profession.

We have, perhaps, noticed this subject sufficiently at length, and hope it will be productive of purging the pages of *Braithwaite* from this contamination. If the attention of the profession is once turned to the subject, they will not view the continuance of the practice with complacency, and the only wonder is that it should have been allowed to continue so long without attracting notice, and meeting censure.

N.

Editorial Changes.—Drs. Purple and Buckley have withdrawn from the editorial management of the New York Journal of Medicine, leaving it exclusively in the hands of Dr. Stephen Smith.

Influence of Marriages of Consanguinity upon Offspring.—We would beg the attention of our readers to the subjoined Circular. Dr. Bemiss has already given to the above subject considerable attention, and, in consequence of his publications relating thereto, he was appointed, at the last meeting of the Am. Med. Association, to collect facts and report at the meeting in May next.

Circulars of this kind, as a rule, have hitherto met with very little response from the profession. It is evident that statistical data for an investigation of a problem like that assigned to Dr. B., can only be acquired by means of the coöperation of a number of persons whose interest in science is sufficient to lead them to take some pains in furtherance of its objects. With the data which may be contributed, Dr. B. will be able to arrive at important results and present to the association a valuable report. Let all our readers send an account of all the instances of marriages among blood-relations within their knowledge, answering carefully the questions given in the circular. Even a single instance transmitted by every medical reader of this Journal, would, in the aggregate, form a number, the analysis of which would lead to valuable results.

We would call attention particularly to the request of Dr. Bemiss that instances of such marriages in which no defective issue results, or which are sterile, may be sent as well as instances of an opposite description. To determine fairly the influence of consanguinity, it is plain that instances of the former as well as the latter must be obtained.

We trust most sincerely that the present effort to obtain statistical data will prove an exception to the rule as regards the distribution of circulars hitherto; and that Dr. Bemiss will find himself in possession of abundant data to arrive at important conclusions. *

LOUISVILLE, Ky., July 16, 1857.

DEAR SIR:

May I solicit your coöperation in collecting material for a report I am to present to the next American Medical Association on the "Influence of Marriages of Consanguinity upon offspring." I wish to make my report exclusively statistical, and if each of the medical gentlemen to whom I address calls for assistance, will contribute even a small amount of aid, I will be enabled to sum up results enough to justify very positive conclusions upon this subject.

If instances of such marriages have occurred under your notice, will you

oblige me my sending the results as carefully analyzed as your knowledge of circumstances will permit?

The points of which I wish more especially to be informed, are:

1. The degree of consanguinity of parties, (whether first, second, third or fourth cousins; or as in rare instances, uncle and niece.)
2. The date (approximative) of marriage.
3. The number, sex and *condition* of children born to each marriage.
4. The number of children dead, cause of death, and age when known.
5. The constitution, temperament and occupation of parents, with any habits or circumstances calculated either to favor or retard the normal development of offspring.

I wish my report to be entirely unprejudiced; my only aim is *truth*, and I desire those instances of such marriages where no defective issue results, or which are sterile, as carefully sought out and reported as the opposite; and whenever the defects of offspring may be reasonably referred to other causes than consanguinity, I wish the facts distinctly set forth.

I am well aware that investigations in these cases often foiled by the sensitiveness of parents upon the subject of kinship, but in such instances information as circumstantial and reliable may often be obtained from friends of the family.

I trust, My Dear Sir, I will not be accused of making undue demands upon your time and patience in these requests, such is my anxiety to furnish a comprehensive report, and one that will embody a great amount of new and valuable information, that I will await your answer with much solicitude, and cherish grateful recollections of all who consent to become my co-laborers.

If your engagements should prevent your own participation in these enquiries, would you be so kind as to entrust them to an intelligent student, or any reliable person whom you may select?

I wish to get in my statistics by the first of the ensuing year, so as to tabulate them, but would be gratified to hear from you at an earlier period.

Very respectfully,

S. M. BEMISS.

P. S. Names of parties not desired, as all personal allusion will be avoided in my report.

Science and Good Sense.—The following extract is from a lecture introductory to a clinical course at the Hospital La Ribosière, at Paris, by Dr.

Pidoux.* "Science is less difficult than good sense. Science takes the physical signs of disease for the disease itself. She confounds the morbid anatomy of the body with pathology; and, having thus destroyed disease, she reanimates it by a *Deus ex machina*, by investing it with a soul or a vital principle which seem to have been invented expressly for the protection of anatomical medicine. Montpellier lends for a moment her life without organs to the organs without life of Paris, and from these two abstractions is formed a scholastic entity very convenient for argument."

Jenner Monument.—A bronze statue of Jenner has recently been successfully cast, and is to be placed at London in an appropriate site not yet designated. This monument is a tribute from all nations, subscriptions having been collected from different countries, and, for the most part, from members of the medical profession. We are gratified to see that the sum contributed by the medical profession of America exceeds that from any other country. It is nearly double the amount collected in the country honored by the birth of Jenner. America has transmitted 340 pounds; England 196 pounds—the latter including 25 pounds from Prince Albert. Russia comes next to America in the amount of contribution, the sum being 241 pounds.

If we were to estimate the claim to the tribute of a monument by the services rendered to mankind, so long a time should not have elapsed since the death of Jenner and this act of acknowledgment. It is a significant fact that a monument is reared at this late day, by contributions, chiefly from medical men, (the only class whose interests were affected unfavorably by the discovery of vaccination,) of all countries. But a fact still more significant is this—scarcely one in ten of the intelligent members of society are cognizant even of the name of the discoverer of vaccination! Military heroes who have sacrificed hecatombs of human lives to objects of personal ambition or state aggrandisement are remembered with sentiments of admiration, and their memories honored by monuments. Scarcely a town in Great Britain is without its statue of Wellington. But the far greater man and the benefactor of his race who, after twenty years of investigation, achieves a discovery which has nearly eradicated the most loathesome and fatal diseases, receives a pitiful acknowledgement of his services during life, and as a tardy

* *Annuaire des Science Médicales*, 1856, p. 145.

tribute to his memory a single class of society—a class whose intelligence and benevolence, God be praised! exceeds their wealth—unite to erect a bronze statute, costing a little more than a thousand pounds! Here is food for moralizing which we leave with our readers. *

Paracentesis Thorosis.—Dr. Bowdich warmly advocates a more fearless use of this operation, in ordinary cases of accumulation of fluid in the pleural cavity. His experience has certainly shown that the bug-bear of opening into the chest is one of those ideas which has been handed down to the terror of the surgeon, and delay of medical progress, until some bold man passes the Rubicon and proves the safety of an operation, hitherto avoided by practitioners.

Dr. Bowdich says, through the pages of the Boston Med. Journal, "since April 17, 1850, I have operated upon sixty-two individuals, of both sexes and all ages. I have punctured one hundred and eleven times. I know of nothing in practical medicine which has afforded me more satisfaction than this simple operation."

The name of Dr. Bowdich is a sufficient guarantee for the *honesty* of this statement; and a practitioner can hardly be said to give humanity the benefit of all that science can do if he suffers his patient to carry quarts of liquid in his chest, subject to the slow and uncertain action of absorption, when he can be relieved and the diagnosis made certain, by an operation which its distinguished advocate likens to venesection or vaccination. An operation so simple and so harmless, which procures such certain relief permanent or temporary, to a frequent and distressing malady, cannot be too strongly advocated in the periodical literature of the day. Let us make it another point in which we excel as *practitioners* our transatlantic brethren.

It seems probable that another important benefit may be derived from the early employment of thoracentesis. If it be performed before the lung has lost its elasticity by long compression, would it not expand more nearly to its former volume, and the contraction of the thoracic parietes, with the consequent unsightly dropping of the shoulder be lessened if not prevented? The value of this surmise requires extended observation for its establishment; but if it be true that the rapid and early evacuation of the fluid has any effect upon the deformity which attends recovery from thoracic effusion, it will add something to the value of an operation, the advantages of which must soon be felt in every day practice. F.

Medical Department of the University of Louisville.—This institution, during the last session, met with a serious calamity in the loss of the fine edifice appropriated to its use, together with the museum and a portion of the library and chemical apparatus. The building and its contents, however, were largely insured, and we are gratified to learn that a new structure will be in readiness for the approaching session. The new college, it is stated in the circular, will be greatly superior in every respect, to its predecessor, and, in fact, will have no superior in the United States. Extensive purchases have also been made, mainly in Europe, for a new museum, apparatus, etc., which it is expected will be received before the lectures commence.

Some changes in the faculty have recently occurred. Prof. Rogers has resigned the chair of theory and practice, and been elected professor of clinical medicine. Dr. Theodore S. Bell, of Louisville, has been elected to the chair vacated by Prof. Rogers. Prof. Bell was for many years an associate editor of the *Western Med. & Surg. Journal*, contributing largely to its pages. As a writer he is distinguished for varied knowledge, independence of thought, and a piquancy of style fitting him admirably for the post of an editor. He enters on the duties of a professor at a mature age, with a large experience as a practitioner, and with habits of application (heretofore directed to a multiplicity of subjects) such as are rarely found even by the most industrious of the members of the medical profession. Notwithstanding the cares and disastions incident to practice, few men in our country have given to daily study so many hours.

We cordially wish for this institution continued prosperity. *

Excito-Secretory System of Nerves. Dr. H. F. Campbell.—The priority of the idea of a portion of the nervous system belonging specially to secretion, appears to be conceded on all hands to our countryman, Dr. H. F. Campbell, of Augusta, Georgia. Dr. Campbell's first publication relative to this subject, was in 1850. He enunciated the idea more distinctly in a report made to the American Medical Association in 1853, and again more recently in an essay which gained the prize at the last meeting of the association. Marshall Hall, who had been led to recognize in the functions of the nervous system this new division, resigns the merit of the discovery in favor of Dr. Campbell.

Now that the question of priority is settled, it remains to render unques-

tionable the validity of the discovery itself. The experimental researches of Bernard go far toward establishing the existence of an excito-secretory system. We may present, hereafter, to our readers, facts relating to the subject.

Dr. Campbell has recently received the appointment of professor of anatomy in the medical college of Georgia. He has for several years been connected with that institution as demonstrator of anatomy. He succeeds, in the chair of anatomy, Dr. George M. Newton, resigned. Dr. Newton has enjoyed the reputation of being one of the best teachers of anatomy in the country.

New Orleans School of Medicine.—Dr. A. Foster Axon, the professor of physiology, has been compelled by the state of his health and the pressure of other occupations, to resign his chair in this institution. Dr. Anthony Perriston, the adjunct professor of anatomy, has been appointed to the vacancy; and Dr. Theodore S. Clapp will fill the vacancy made by the appointment of Dr. Perriston.

By reference to the circular it will be seen that the faculty propose, "to give experimental, chemical, and microscopic physiology a prominent position in the curriculum of studies." Dr. Perriston has already spent three years in Europe in the pursuit of his favorite studies. He will spend the following summer, however, in Paris, and will make valuable additions to the museum and library of the institution.

We are glad to see a disposition in medical colleges to encourage the application of the microscope and vivisection to the teaching of physiology. Experimental and demonstrative physiology was first taught in this country, at the Buffalo Medical College, in 1851-2, by Prof. John C. Dalton, Jr., who repeated before the class, the brilliant demonstrations of M. Bernard; since then, the example has been followed by many of our teachers of this branch, and we trust that so interesting and impressive a mode of instruction may be more generally adopted.

Fusion of the Medical Schools in Cincinnati.—The two rival medical schools at Cincinnati, have amalgamated, under the title of the Medical College of Ohio, the name of the older of these institutions. This union involves some changes in the corps of faculties. Professor S. G. Armor has resigned his chair in the Ohio Medical College, and has accepted, as we

learn, a professorship in St. Louis. Professors Marshall, Worder, and Tate, also, connected formerly with that college, have withdrawn. The venerable Professor Mussey, of late connected with the Miami school, retires. Professors Judkins, Comegys, Foote, and Mendenhall, formerly of the last named school, remains in the present organisation. Inasmuch as two medical schools are not needed in Cincinnati, and the immediate proximity of rival institutions to each other is apt to lead to evils affecting the prosperity of both, as well as impairing the comfort of those connected therewith, this consolidation must be (to use a quotation occasionally employed by writers) a "consummation devoutly to be wished."

Rush Medical College.—Some changes have taken place in this institution since the close of the last college term. Professors Evans and Herrich have resigned, and their places have been filled as follows: W. H. Byford, M. D., chair of obstetrics; John H. Ranch, M. D., chair of materia medica, etc. Prof. Johnson, formerly the incumbent of the chair last named, has been transferred to the chair of physiology and pathology, made vacant by the resignation of Prof. Herrich. The faculty of the college passed complimentary resolutions on the occasion of the retirement of Professors Evans and Herrich.

Jefferson Medical College.—Dr. Thomas D. Mitchell has been elected to the chair of Materia Medica and Therapeutics in the Jefferson Medical College, in place of Dr. Huston, who has recently resigned in consequence of ill-health. Dr. Mitchell is favorably known as the author of a large and practical work on therapeutics. He has long been a teacher of this branch of medical science, having formerly been for many years connected with the Transylvania Medical College, at Lexington, Ky., and, also, with the Medical College of Ohio.

Trouble among the Wayne Co. Doctors.—The Wayne County Medical Society held a meeting the other day and appointed a committee of three to investigate the following charges against one of its members, viz: "For

violating a rule of the society and of medical ethics, by advertising publicly and by handbills, inviting the attention of individuals affected with particular diseases of the lungs, &c., professing superior skill and knowledge, these being the ordinary practices of empirics, &c," The charges were sustained and *the member expelled!*

Her Majesty Queen Victoria, has been graciously pleased to bestow the honor of knighthood on her chief accoucheur, Dr. Locock. It has been suggested, however, that this distinguished gentleman deserved, after his arduous duties, to have been elevated to the peerage under the title of Earl Deliver us!—*Montreal Monthly Jour. of Med. & Surg.*

The above item of medical news had a place in our number for June, with the slight difference, that the title there quoted as most appropriate for Sir Charles Locock, was "Lord Deliver us," instead of "Earl Deliver us," as our Canadian friend has it. Perhaps he does not see the point, but we can assure him that "it created a great laugh at the time." F.

An Associate Editor.—The appearance of a new name upon our cover for this month may call for an explanation. The "Senior Editor" has found himself many times overburdened with the labor incident to the entire care of both the editorial and business interests of the Journal, and he gladly accepts the assistance of his friend whose name is announced on the title-page. It is believed that this addition to the editorial force will secure a greater variety and interest in our pages, and in the promptness of its issue.

Thanks.—A paragraph, hinting toward dunning, in our last number, has drawn out many cash replies, accompanied in the majority of instances with remarks so complimentary to the Journal, that the remittance seemed doubled in value. Our friends have our thanks.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

OCTOBER, 1857.

NO. 5.

ORIGINAL COMMUNICATIONS.

ART. I.—*Fractures of the Malar Bone, Superior Maxillary, Ethmoid, and of other bones of the Face.* By **FRANK H. HAMILTON, M. D.**

MALAR BONE.

I have been unable to find any records of a simple fracture of the malar bone, that is to say, of a fracture unconnected with a fracture of other bones of the face. It is probable, however, that it sometimes occurs, but that not being accompanied with much displacement, it is overlooked. I have myself seen a fracture of the upper margin, or of that portion which constitutes a part of the orbital border, in two or three instances, while I was unable to detect any other fracture among the bones of the face; but it is by no means certain that other fractures did not exist, perhaps in some of the bones which form the socket, or in the superior maxilla, as mere fissures, or as fractures with only slight displacement. The prominence of the malar bone and especially the sharpness of this orbital margin would enable the surgeon to detect easily the smallest displacement, or even a fissure, while a much more extensive displacement elsewhere would escape detection.

The following observations will illustrate these remarks:

Observation First. With a heavy steel hammer I struck the left malar bone of a naked skull breaking the orbital margin near its middle, the line of fracture extending backward through the whole length of the orbital plate, and the outer half of the plate being pressed about two lines into the orbital cavity. There was no other fracture of the malar bone.

The nasal process of the superior maxilla was broken near its base, and the whole upper portion of this bone was thrown inward toward the nasal passages in such a manner as nearly to close them; while its lower margin was thrown out, separating the two upper maxillary bones from each other along the whole line of the inter-maxillary suture. This separation was about two lines in front and less toward the palatal bones.

The ethmoid was fissured through the whole length of its os planum, from before backward.

Remarks.—It is very easy to understand how a blow upon the malar bone, coming a little from one side, should produce this form of displacement of the superior maxilla.

The two upper maxillary bones form, as they are placed opposite to each other, an irregular arch, one end of which rests upon its fellow, at the inter-maxillary suture, and the other end rests upon the nasal and frontal bones; while over the centre of the arch is situated the malar bone. The force of a side blow upon the malar bone will expend itself therefore chiefly upon the base of the maxillary apophysis, as being in the line of the direction of the force. The force continuing to act, after the apophysis is broken, the portion of the superior maxilla above the floor of the nares will fall inward toward the septum, while the portion below will tilt outward and open the inter-maxillary suture along the roof of the mouth. This suture will also open more widely in front than behind, owing to the greater depth of the suture in front.

One might suppose that it would be a very easy matter to restore these bones to place upon the naked skull, after such an accident. Certainly it would be very desirable to do so, were this accident to occur to any patient, since the malar bone is slightly depressed, the nostril upon this side is nearly closed, and the line of the teeth is disturbed, and it is possible also that an opening might be established between the nose and mouth immediately back of the incisors. In fact, however, I found the restoration impossible. It could not be accomplished by an instrument within the nose pressing out-

ward, nor by pressing inward upon the teeth and alveola; not certainly without very great and unwarrantable force. The difficulty consisted simply in the antagonisms of the serrated margins of the inter-maxillary suture, which projecting one or two lines on each side, could not be made to interlock again, but were firmly braced against each other.

A repetition of the blow broke the malar bone completely in two, disarticulating it also at its zygomatic suture.

The superior maxilla was now separated wholly from the other bones of the face and skull, carrying the palate bone with it entire. The body and sinus of the upper maxilla still, however, remained unbroken.

Observation Second. Blow inflicted with the hammer, square upon the malar bone, broke the malar bone on its orbital margin in the same manner as in observation first. There was also a fissure on the upper and outer margin of the bone. There was no other fracture of the malar bone.

The zygoma was broken transversely near its middle, through that portion which belongs to the temporal bone.

The superior maxilla was broken through the antrum, a little below the base of the malar eminence, and the malar bone was forced into the antrum several lines. The alveola was not broken.

The ethmoid bone was fissured antero-posteriorly through its orbital plate.

Remarks. In this example the walls of the antrum having at once given way, the force of the blow did not reach the nasal apophysis. It was found very easy to lift the malar bone to its place, with an instrument introduced through the broken walls of the antrum.

Observation Third. The hammer falling upon the malar bone depressed it slightly, but did not break it.

The superior maxilla was found broken through the walls of the antrum a little below the malar apophysis. No other fracture.

The *second* blow broke the malar bone through its centre, breaking also the zygoma near its centre.

The *third* blow broke the nasal apophysis of the superior maxilla near its base, comminuting the antrum; into which the malar bone was forcibly driven. At the same time the orbital plate of the malar bone was thrown up into the socket. The ethmoid was also broken.

Observation Fourth. *First* blow did not fracture the malar bone, but

broke the walls of the antrum, and at the same moment produced a fissure extending vertically through the alveola between the first, and second molars, into the mouth.

The *second* blow broke the malar bone through its centre irregularly, and also the zygoma transversely, near the centre of its arch. The nasal process of the superior maxilla was broken at two points, one of the lines of fracture extending into the orbital socket.

The skull was also found broken at its base through the lesser wings of Ingrassina. The force of the blow having been conveyed, apparently, along the orbital plate of the superior maxilla and os planum.

Remarks. This is the only example in which the fracture has extended through the alveola, and it was the result of the first blow. The fracture of the base of the skull by the second blow indicates the possibility of producing a fatal lesion of the brain or of its blood-vessels by a blow upon the malar bone.

General Summary. A fracture of the superior maxilla has occurred in every instance: and twice when the malar bone was not broken; in each of the two last cases the antrum alone was broken and the depression of the malar bone was scarcely noticeable. In the second of these cases, the fracture extended also through the alveola.

In three cases the nasal apophysis has broken near the base, and in one case at two points. One of the three fractures of the nasal apophysis was accompanied with a diastasis of the superior maxilla through its inter-maxillary suture.

The malar bone has been broken twice by the first blow, and always when the blow has been repeated. The orbital margin and orbital plate has been fissured twice, the outer portion of the orbital plate being pushed a little into the socket. Once this plate has been pushed downward.

The zygoma has been broken three times, and always transversely, a little beyond its centre, or where the bone is the most slender and most convex.

The ethmoid has been broken three times, and always longitudinally through the orbital plate.

The sphenoid has been broken once, at the base of the skull.

In addition to these observations upon the naked skull, I have seen two examples, which illustrate the relative infrequency of fractures of the malar

bone, as compared with fractures of the superior maxilla and of the other bones of the face, even when the blow is received directly upon the malar bone.

CASE I. Pat Maloney, æt. 55, fell about twenty feet and struck upon his face. Six weeks after the accident, while an inmate of the Buffalo Hospital of the Sisters of Charity, I found the right malar bone depressed, but I could not trace any line of fracture in the malar bone. I think the antrum of the superior maxilla was broken and the malar bone forced in upon it.

CASE II. Thomas Crotty, æt. 20, was struck with a hoop, August 15, 1855. He was seen immediately by a surgeon in Canada, but the fracture was not recognized. Five days after he called at my office. I found the outer portion of the right malar bone lifted slightly and the lower and anterior angle depressed about three lines, as if this portion had been forced in upon the antrum.

Prognosis. The malar bone may be depressed, as we have seen, to the extent of two or three lines, without being broken. This accident will be more properly considered under fractures of the upper maxilla. A fracture of the malar bone implies, therefore, generally, that great force has been applied, and that other fractures exist as complications. This may not be true, however, when only the orbital margin of the socket is broken. If the orbital plate is broken, and a portion of it is pushed into the socket, it may occasion a slight protrusion of the ball, as in two cases related by Dr. Neill as fractures of the upper maxilla, and as has been noticed in the experiments already recorded. This protrusion of the eye-ball will probably continue in some degree, as long as the bones remain displaced. It is quite probable, however, that in some cases, after severe injuries of the face, a moderate protrusion of the eye-ball is due entirely to extravasation of blood in the socket; a circumstance which would be likely to follow a fracture of the bones of the socket, and to increase temporarily the protrusion of the eye.

If the body of the bone is broken entirely through, and coma supervenes upon the accident, there is some reason to fear that the skull is fractured at its base, and the prognosis ought to be grave.

Treatment. If there is only a fissure of the orbital margin, it will not require attention; but if the fissure extends through the orbital plate and at the same time the anterior and inferior margin of the bone is depressed, in

consequence of which the orbital plate is tilted upward and made to push forward the eye-ball, the propriety of surgical interference may be considered. If this protrusion is considerable and evidently due to the displaced bone, an attempt should be made to lift the body of the malar bone and thus to restore to position its orbital plate. The method of accomplishing this I shall describe particularly when speaking of fractures of the superior maxilla with depression of the malar bones.

UPPER MAXILLARY BONES.

These fractures assume so great a variety in respect of form, situation and complications, that it would be impossible to speak of them systematically or to establish any thing but very general rules as to treatment and prognosis.

They may be broken, or loosened from each other or from the other bones with which they are articulated, with or without any farther fracture; the nasal processes may be broken, and generally this accident is accompanied with a fracture of the nasal bones also; the malar bones may be forced in, carrying with them a portion of the outer wall of the antrum; the alveola may be broken and more or less completely detached; and either of these several fractures may be complicated with fractures of the other bones of the face or of the base of the skull even.

Treatment. When the harmonies of the upper maxillary bones are only slightly disturbed, nothing but a retentive treatment is necessary.

A man was thrown backward from a loaded cart, one wheel of the cart passing over his face. He was taken up unconscious, but when I saw him on the following morning, his consciousness had returned. The right malar bone was broken and forced down upon the antrum about three lines. Both superior maxillæ were loosened from their articulations, and could be moved laterally, the motion producing a slight grating sound. The same motion and grating occurred whenever he attempted to swallow. No effort was made to elevate the malar bones, nor did I find any means necessary to retain the maxillary bones in place, the amount of displacement being very inconsiderable, and never sufficient to be observed by the eye. Cool lotions were applied constantly to the face, and the patient was sustained by a liquid diet. On the ninth day all motion of the fragments had ceased, and on the twenty-seventh day the patient was completely recovered, with only the depression of the malar bone remaining.

Sargent, of Boston, reports a similar case, in which a slight separation of the maxillary bones united promptly and without any retentive apparatus.*

But in a case in which the superior maxillary bones had been more completely torn from their connections, complicated with other severe injuries, I found it necessary to support the fragments by closing the lower jaw upon the upper, and by suitable bandages. The patient died, however, on the twelfth day.†

Graefe recommends, where the bones are thus extensively separated and displaced, an apparatus made of steel, and suitably covered, which is to be applied against the forehead and buckled under the occiput. From the two sides descend a couple of steel plates, which, having arrived at the free border of the upper lip, are reflected upon themselves, and are made to support upon their extremities long silver gutters, intended for the reception of not only the displaced teeth and alveola, but also those teeth which are firm.‡

Wiseman having been summoned to a child with his whole upper jaw forced in, by the kick of a horse, "beating the ethmoides quite in from the os cribriform," and forcing the palate bone against the back of the pharynx, found great difficulty in securing a permanent readjustment. At first he attempted to introduce his finger back of the bone, but failing in this he bent an instrument into the form of a hook, and passing it between the bone and the pharynx, he easily replaced the fragments. But on removing the instrument they were again displaced. Immediately he had constructed an instrument by which the bones could be not only easily reduced, but also retained in place, extension being made by the hands of the child, his mother and others, alternately. In this way the reünion was finally effected, and "the face restored to a good shape, better than could have been hoped for."§

Harris, of New York, mentions a case in which a child, two years old, having fallen from a height of fifty feet upon the pavement, was found to have a diastasis of both the superior maxillary and palate bones; the separation being sufficient to admit the little finger, and extending from between the alveoli which supported the central incisors, to the soft palate. It is not said whether any efforts were made to reduce the bones, but six weeks after

* Boston Med. and Surg. Jour., vol. 52, p. 378.

† Report on Deformities after Fractures. Trans. Amer. Med. Association, vol. 8, p. 375, Case iv.

‡ *Traité des Frac., etc.*, par L. F. Malgaigne, p. 373.

§ *Chirurgical Treatises*, by Richard Wiseman. 1734. p. 443.

the injury was received, they were still open, and it was proposed to close the space by a plastic operation as soon as the condition of the patient would warrant such a procedure.*

I suspect that in this example, as in the first experiment quoted under fracture of the malar bone, it was found impossible to adjust the bones and close the inter-maxillary suture, and for the same reasons.

If, in consequence of a blow received upon the *ossa nasi*, the nasal processes of the superior maxilla are broken down, they may be lifted and adjusted in the same manner as the *ossa nasi*.

I have seen several examples of this accident, and I have in my cabinet a specimen, in which the nasal bones being driven in by the kick of a horse, the nasal process upon the left side is broken off just above the root of the cuspid tooth, and its upper end inclined inward toward the nasal passage and backward, until it is completely buried. In this situation it has become firmly united to the bony and soft tissues into which it was brought in contact.

The following example will illustrate some of the complications and difficulties connected with a depression of the malar bone, and consequent fracture of the antrum maxillare.

M. P., of Colesville, aged about 34 years, was thrown from a height, striking upon his face, and forcing the right malar bone down upon the antrum of the superior maxilla. Dr. L. Potter, of Varysburg, and myself were called.

The deformity produced by the sinking of the malar bone was very striking, and the patient, as well as ourselves, was very anxious to have it remedied if possible. We found some of the teeth upon the side of the fracture loose, and we determined to extract them and press up the bone with an instrument introduced through the empty sockets. The first attempt to extract a molar tooth, however, brought down several teeth, and the whole floor of the antrum. The detachment of this fragment was also now so complete that we believed it necessary to remove it entirely, a labor which was accomplished with infinite difficulty, and with no little hazard to the patient, as dissection had to be extended very far back into the throat, and in the end it was not effected without bringing out, attached to the fragment of maxillary bone, a considerable portion of the pyramidal process of the *os palati*.

The time occupied in this operation was at least one hour, during which we were every moment in the most painful apprehensions lest we should

* New York Jour. Med., vol. 13, 2d ser., p. 214.

reach and wound the internal carotid, which lay in such close juxtaposition to our knife that we could distinctly feel its pulsation. After its removal, the hæmorrhage was for an hour or more quite profuse, and could only be restrained by sponge compresses pressed firmly back into the mouth and antrum.

When the hæmorrhage was sufficiently controlled, we proceeded to examine the antrum, the floor of which being removed entire, permitted the finger to enter freely. The restoration of the malar bone was now accomplished without much difficulty, and with only moderate force.

Two years after the accident, the face presented, externally, no traces of the original injury. The malar bone seemed to be as prominent as upon the opposite side, and there was no perceptible falling in where the teeth and alveoli were removed. During several months after the removal of the bone, the antrum continued to discharge pus, but at length a semi-cartilaginous production closed in the cavity below, entirely reconstructing its floor, and the discharge ceased. Since then he has experienced no further inconvenience.

I wish to propose two or three expedients for lifting the malar bone when it has been thrust down, which may in certain cases be substituted for the mode which has been heretofore generally adopted.

In many instances, no difficulty will be experienced in resorting to the usual method. The recent loss of one or more teeth opposite the floor of the broken antrum, or the complete displacement of a tooth by the accident itself, will give an opportunity for the perforation of the antrum through the open socket, and for the introduction of a suitable instrument for lifting the depressed bone. Unless, however, the opening is quite large, the instrument employed must be so small, such as a straight steel sound or a female catheter, as to expose the parts against which its end is made to press, to some risk of being broken and penetrated. It is even possible in this way to penetrate the socket of the eye, and thus inflict serious injury upon the eye itself. Yet, with some care, such accidents may be avoided, and it is probable that, in the cases supposed, where the sockets of the teeth opposite the base of the antrum are open, this method will continue to have the preference.

But if the teeth remain firm in their places, or if they have been some time removed, and the sockets are filled up, and we wish to enter the antrum at its base, we must either drill through its anterior wall above the roots of the teeth, or we must proceed to extract a tooth. The first method gives an inconvenient opening, and one through which it will be necessary

to use a curved instrument; but yet it is a method far less objectionable than the extraction of a tooth which is firm, or which is even tolerably firm in its socket, and which may require the forceps for its removal. The objections to this latter procedure were suggested by the tedious and painful operation already detailed. The first attempt to extract a tooth brought down the whole floor of the antrum, with all its corresponding teeth and the pyramidal process of the palate bone. The tooth was already loose, and we thought it might be easily taken out, but it had not occurred to us that it was loosened by the comminuted condition of the walls of the antrum, and of the alveola. The experiments made upon the dead subject would seem to show that this fracture and comminution of the alveola is not a very frequent result of a fracture of the antrum produced by a blow upon the malar bone, yet it may happen, and whenever it does the attempt to extract a tooth must always expose the patient to the same hazards. Certainly it is no trifling matter to pull away all of a man's upper teeth upon one side, and to open freely into a broad cavity which might never close again, and which, in this event, must always serve as a place of lodgment for particles of food, and for foul secretions, to say nothing of the external deformity which it is likely to produce, and of the severity and even danger of the operation.

I wish then to suggest certain procedures, the value of which I have not yet had an opportunity to determine by any experiment upon the living subject, but which I have carefully and frequently tested upon the dead.

First, we ought to attempt to lift the bone by putting the thumb under its zygomatic process and body within the mouth. If the bone is thrown directly downward, or downward and backward, this method can scarcely fail; and even when it is thrown downward and forward so as to press into the antrum, it is likely to succeed. If, however, for any reason, the thumb cannot be brought to bear upon its under surface, we may make a small incision upon the cheek over the anterior margin of the masseter muscle, where its insertion into the malar bone terminates, and pushing a strong blunt hook under the bone, we may lift it with ease.

Where the depression of the malar bone is in the direction of the anterior and superior angle these means may not be found available, and we may then employ a screw levator, an instrument which I find already constructed in a case of trephining instruments made for me by Mr. Luer, of Paris, and which I have often used and constantly recommended to my pupils, in certain cases of fractures of the skull. The instrument ought to be made of the best steel, and with a broad, sharp-cutting thread. A slight incision being made through the skin, and down to the centre of the malar bone, the ele-

vator is then screwed firmly into its structure, and now its elevation and adjustment may be accomplished with the greatest ease.

Malgaigne remarks: "In all complicated fractures of the upper jaw, there is one principle which surgeons cannot too much study, namely, that all fragments, however slightly adherent they may be, ought to be most carefully preserved, and they will be found to unite with wonderful ease. This remark had already been made by Saviard. Larrey insists strongly upon it and we have seen that M. Baudens, so great an advocate for the removal of loose fragments, has declared for these fractures a special exemption."*

Malgaigne has here especial reference to fractures of the alveola or to fractures implicating the alveola and extending more or less into the body of the bone.

It would be an error, however, to suppose that a reünion will in these cases uniformly take place. Exceptions have occurred in my own practice; the fragments becoming loosened and completely detached after the lapse of several weeks. In the case related by Miller, the whole floor of the antrum having been broken off, in an unskillful attempt to extract the second right upper molar, it was found impossible to make it unite, and it was subsequently removed.† Such unfortunate results certainly may sometimes be reasonably anticipated. Yet they occur so seldom as to justify the opinions and practice advocated by Malgaigne.

In some instances, where fragments are displaced carrying with them several teeth, while others in the same row remain firm, it will be sufficient to close the mouth and apply a bandage as for fracture of the inferior maxilla; in others the teeth and their alveoli, ought to be fastened with silk, or gold or silver thread; or gold or silver clasps may be applied, or gutta percha moulded to the teeth and jaw.

In a case of fracture of the right superior maxilla reported by Baker, of Norwich, N. Y., complicated with a fracture of the inferior maxilla, the alveoli were retained in place very perfectly by a mould of gutta percha.‡ Neill, of Philadelphia, has also reported three cases of fracture of the bones of the face, involving the superior maxilla, in two of which the eyes were made to protrude more or less from their sockets.¶ The loosened alveoli were made

* *Op. cit.*, vol. i, p. 376. Paris ed.

† *News letter*, April, 1854. Also, *Bost. Med. and Surg. Jour.*, vol. li, p. 246.

‡ *New York Jour. of Med.*, vol. i, 3d ser., pp. 362.

¶ See Observations first and second, under fractures of the malar bone; in which cases the orbital plate of the malar bone was pushed into the sockets.

fast by wire. The subsequent deformity was inconsiderable, yet in no instance was the restoration complete.* The same method was adopted successfully by a surgeon in Virginia, in the case of a negro 50 years old, where most of the teeth of the left upper jaw were forced into the mouth, carrying with them their corresponding alveolar processes. The teeth remained firm in their sockets, but the separation of the bone was complete, the fragment being held in place only by the mucous membrane of the mouth. On the eighth day the surgeon found that the negro had removed the wire, and also the cork from between his teeth, and the maxillary bandage; but the soft parts had already united and the bones showed no tendency to displacement. His recovery was speedy and it was accomplished without any farther treatment.†

ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, Sept. 1, 1857.

The association met at the usual hour.

Present—Drs. Rochester, Hamilton, White, Strong, Gay, Eastman, Wilcox, Nichols, Newman, Nichell, Lemon, Treat, A. Flint, Jr., Ring, Hutchins, Boardman, Baker, and Miner.

The President, Vice-president and Secretary, being absent, on motion, Prof. Rochester was appointed president, *pro-tem*, and Dr. A. W. Nichols, secretary, *pro-tem*.

The minutes of the last meeting were read and approved.

Dr. Treat then introduced a patient to the society, for diagnosis. A scrofulous-looking girl, aged 15 years, very much emaciated; states, that she had been perfectly well and quite fat up to last Christmas; was then seized with pain in the side, not severe; began to emaciate; had attacks of diarrhoea off and on; did not suffer much from pain; abscesses formed on neck, and discharged a quantity of pus. Now, has some febrile movement; there is great emaciation, particularly marked in the extremities; there are now several small abscesses on neck, which are discharging; has a good and even keen appetite; no diarrhoea at present; drinks considerable, and passes a large quantity of water; the abdomen is tumid, a peculiar rigidity of the

* Phil. Med. Exam., vol. x, new series, pp. 455-8.

Amer. Med. Gazette, vol viii, new series, p. 106.

muscles existing. Her aspect is decidedly morbid, presenting the scrofulous cachexia; her mother died of consumption.

(Prof. Rochester having been called away, Prof. White took the chair.)

Prof. White having examined the abdomen, thought there was disease of the organs of assimilation, very probably affection of the mesenteric glands.

Prof. Rochester stated, that he was struck with the appearance of the patient as she entered the room; he concurred in the opinion of Prof. W., and thought the disease to be that sometimes called *adenosis scrophulosa*.

Prof. Hamilton then examined the abdomen of patient; and suggested that the tension of abdomen was not like that due to presence of water, but probably was owing to rigidity of the muscles; he had no doubt that there existed scrofulous disease.

Dr. Gay then presented a beautiful specimen of fracture of the neck of the femur with complete bony union. Dr. G. stated, that he was indebted to Dr. Bissell, of this city, for the specimen. The person from whom it was taken was a female, æt. 62 years, residing in this county, the mother of Dr. B—. The fracture occurred from a fall on the hip; Dr. G. was not positive, however, in regard to the nature of the fall. The limb was dressed, splints being applied; these were removed in a short time; and in a few months she regained the use of the limb. Previous to the accident, she had been laboring under an attack of tuberculosis pulmonalis; during the time she was being treated for the fracture, her health improved very much; but she died about four years after she had recovered the use of the limb, from consumption.

Prof. Hamilton remarked that the specimen was an interesting one; the capsule was present, (although dry,) which he had not often seen in the specimens of this fracture which he had examined. Though this might be a fracture within the capsule, as was supposed by Dr. Gay, yet it lacked the *positive evidence* of such a fracture. Prof. H. had never seen a specimen of fracture within the capsule with bony union, which has entirely satisfied him. For several reasons, he is led to think that this specimen is not one of fracture within the capsule. First, a fall on the foot would have been much more likely to have produced such a fracture than a fall—as in the present instance—on the hip. Next, although the capsule was attached, yet he was unable to determine that the line of fracture was within the capsule, entirely; he could not see the line of fracture even. Furthermore, the neck of the femur was gone, except about one quarter of an inch above. He could not positively state where the line of fracture was, possibly it might have

been across the trochanter major; the direction of the injury would tend to confirm this view. He further stated that the bone was united completely by bone. The shaft was fairly *within* the head of the bone. How did it get there? Not by direct injury. The shaft was sent into the neck, immediately; absorption of the neck then took place, leaving the shaft in the head. He could think of no other explanation. The specimen was a very interesting one; there was complete bony union. Yet, it lacked the positive evidences of fracture within the capsule.

Discussion on Cent of Nickel and Copper, Coinage of 1857.

Dr. A. W. Nichols reported two cases in which the new cent had been swallowed and passed.

CASE A. Girl, *æ*t. 3 years, swallowed a new cent, coinage of 1857; passed into the stomach with some difficulty, being forced down by successive draughts of water; the parents being alarmed, a dose of *ol. ricini* was given at night, and the cent passed away the next morning, having been in the alimentary canal about thirty-two hours; no unpleasant symptoms existed during its continuance in the *primæ viæ*, nor during its exit; the cent was slightly corroded.

CASE B. Girl, *æ*t. 2 years, swallowed a cent, coinage of 1857; passed into the stomach with some difficulty; no medicine was given; it gave rise to no unpleasant symptoms; and passed without inconvenience, in twenty hours after it had been swallowed; this cent was scarcely tarnished.

Dr. N. regretted the absence of *Prof. Hadley*, in whose possession the last-mentioned cent had been placed. He would state, however, the information communicated to him by *Prof. H.*, in regard to the properties of the constituents of the cent of 1857. This cent was to weigh seventy-two grains twenty-four being copper and forty-eight nickel. Nickel was usually found as an ore, in union with arsenic; but in order to render nickel serviceable for coinage or other use, the arsenic must be entirely driven off or removed. The nickel, therefore, employed in the new coin, was perfectly free from arsenic. Nickel resembles very much the ferruginous metals, and is not injurious when taken into the system. When the new cent is swallowed the danger, if any, arises from the presence of the copper. But as there are but twenty-four grains in this cent, the danger would, of course, be much

less than from swallowing one of the old cents. Copper is more readily oxidized and acted on by acids than nickel. But nickel, when alloyed with other metals, as copper, seems to render them less liable to oxidization; this appears to be the case with the new cent.

Dr. N. stated that he had read in the N. Y. papers of cases of poisoning, in children, by swallowing the *new cent*; the physicians having attempted its removal by emetics and cathartics; they noticed symptoms of prostration and of nervous affection which they referred to the poisonous effect of the cent. These symptoms, Dr. N. thought, might be more properly referred to the effect of the remedies employed. As yet, he knew of no instance in which death was stated to have resulted from the ingestion of this coin. He supposed that in most cases no medicine would be required, as the coin itself would serve to increase the peristaltic action of the intestines, and the system would soon rid itself of the foreign body. Emetics would be of no service generally, as the coin lies flat on the mucous membrane of the stomach; and in order for its expulsion, severe contractions of the stomach would have to be produced; if the stomach were full of food, it might be more easily dislodged and removed by an emetic; but the remedy would not be applicable in most cases, on account of its severity.

Prof. Hamilton then presented a report of cases of metallic substances taken into the stomach, as follows:

Nickel and Copper Penny, coinage of 1857.

CASE I. George Richley, æt. 5, swallowed a new cent, Aug. 10, 1857. Forty-eight hours after this his father called upon me for counsel. The child had not yet passed the penny, nor had he experienced any inconvenience from it. The father assured me he would let me know if any ill-effects followed, and as I have not yet heard from him I presume that the lad is well.

Silver.

CASE II. Ezekiel Annis, æt. 45, swallowed a shilling piece, in 1845. The next day it passed without the aid of physic, and without having occasioned any inconvenience.

CASE III. Willey Bagg, æt. 9 months, swallowed a three cent piece in June, 1852. He was then perfectly well. On the following day he had a slight diarrhoea, which continued until the fourth day, when the piece was

discovered in the vessel. It was much discolored, but not eroded. After this he took castor oil, and the diarrhoea ceased.

The following example will show that even bogus coin will sometimes "pass."

CASE IV. May 24th, 1850, E. S., æt. 3, swallowed a bogus ten cent piece. She took no physic, but on the third day it passed. The evacuation accompanying its discharge was loose, like a diarrhoea; but neither the evacuation preceding nor succeeding were loose. Her health was in no way disturbed while the metal was retained, except as I have mentioned. The piece is discolored, but not eroded.

Copper.

CASE V. B. M., æt. 7, swallowed a copper penny, and for about half an hour breathed with great difficulty. During the whole of the same day he experienced an uncomfortable sensation in his stomach. No nausea. He took no physic, and his bowels remained regular. On the third day it passed. It was blackened, but not corroded.

CASE VI. W. H., æt. 45, swallowed a copper penny. For a day or two he felt a choking sensation; after this he felt a weight in his stomach, which sensation lasted two or three weeks. He never vomited or was made sick in any way. He took no physic. He does not know what has become of it.

CASE VII. Ellen M., æt. 7, swallowed a copper cent, Dec. 27, 1849. She was then entirely well. On the following day, and for several days afterward, she vomited everything she eat; and occasionally, when she had not lately eaten, she vomited greenish matter.

March 31, 1849, she was brought to me again. After about a week the vomiting had ceased and she had been well ever since. The cent had not yet passed.

Sometime about the last of April the cent was discovered, having remained in her bowels four months. It was smooth and not in the least eroded, or even discolored.

It is not improbable that in this case the penny was for some days lodged in the lower part of the œsophagus, and that the vomiting was due to this alone. The green fluid was probably only a vitiated gastric secretion.

CASE VIII. Willey Cammen, æt. 4, swallowed a cent, April 1st, 1857. His father soon after brought him to me. He was complaining very much of a pain at the pit of his stomach, which was particularly severe when he attempted to swallow. The attempt was always followed by vomiting. I ordered him a portion of castor oil.

April 6th he was brought to me again. The symptoms remained as when I first saw him. Being persuaded that the penny had lodged above the cardiac orifice of the stomach, I introduced a stomach tube and passed it readily into the stomach, apparently without obstruction. He, however, immediately declared himself relieved, and from this time he experienced no inconvenience. There can be no doubt that the penny was pushed into the stomach at this time. He has remained well ever since; but the parents have not seen the penny.

CASE IX. E. K., æt. 10, swallowed a penny in 1835. Of the result I only know that he is now alive and well.

These are the only cases of swallowing of copper pennies which have come under my own observation, and which I can now call to mind. Some time ago, however, I saw a notice in a newspaper dated June 23, 1851, that a Miss Camberwell, the daughter of a laborer, in England, had "died of mortification of the bowels, by metallic poison, from swallowing a farthing accidentally."

I suspect that the editor was misinformed, and that if she died in consequence of the farthing, it was from mechanical obstruction.

The following is the report of a case found in the 43d vol. of the Boston Med. and Surg. Jour., and copied from the Dublin Quarterly Jour. of Med. Science:

"Dr. Conner detailed to the Cork Med. Society, the history of the following case: A young gentleman, about 18 years of age, called on him in a state of great mental uneasiness, stating that he had, a short time previously, swallowed a copper penny; that he at first made ineffectual efforts to grasp the coin with his finger, and that an apothecary whom he consulted, immediately afterward was equally unsuccessful in his efforts to extract it. A probang was afterward passed without any difficulty, and he was comparatively well for several days, except that his bowels became very costive, so as to require the administration of very active aperients. In about a week from the date of the occurrence, he felt severe pain in the right hypochondrium, about the situation of the pylorus, which became more severe every day, extending up the right side toward the shoulder. Subsequently he had

some degree of nausea and vertigo, and complained of a very peculiar distressing sensation, which he described as resembling a sudden and violent raising upward of the right side of the body, from the point in which he felt the pain, to the top of the head. This feeling recurred frequently and distressed him very much. When this state had lasted a few days, he suddenly discharged a large quantity of blood by the bowels, and very soon after a quantity of clotted blood by vomiting.

"The ordinary remedies were had recourse to, but the hæmorrhage continued until the patient expired, about four and twenty hours from the first discharge of blood. The apothecary who was in attendance, stated that, immediately after death he distinctly felt the coin in the part where it was suspected to have been impacted, namely, in the pylorus; but an opportunity was denied of testing the correctness of this opinion by a post-mortem examination.

"Dr. Conner considered the novelty of the occurrence of death from such a cause a sufficient reason for bringing the case under the notice of the society, more particularly as in books there is more generally found, a recital of the extraordinary substances that have been swallowed and passed through the alimentary canal without producing much injury, than of the exceptional cases in which death has been produced by swallowing objects apparently less calculated to cause danger."

Gold.

CASE X. Mr. F., of Buffalo, aged about 30 years, swallowed, accidentally, a \$20 gold piece. It lodged in the œsophagus. Dr. S., of Buffalo, attempted to remove it, but did not succeed. Subsequently I made the same attempt, and in the second effort I unintentionally pushed it into his stomach. Two years afterward it had occasioned him no inconvenience, nor was he aware that it had ever passed.

Pins.

CASE XI. *A brass pin.* The infant daughter of A. C. H., of Buffalo, aged 2 years, swallowed a brass pin, June 3, 1849. On the same day the parents called upon me. I ordered no remedies. The pin has never been seen, nor did it ever occasion any inconvenience.

CASE XII. July 22d, 1852, Mrs. H., of Buffalo, swallowed a small pin. She felt it distinctly as it was passing down the œsophagus, during several hours. Three days after, when she consulted me, she had experienced no inconvenience. I have not heard from her since.

CASE XIII. Miss —, of Buffalo, swallowed a pin in 1855. She was very much alarmed at the probable consequences, and soon consulted me. I advised her to permit it to take its own way. After two years she tells me that she never has experienced any inconvenience from it, nor does she know what has become of it.

The following remarkable case was mentioned to me some years since by the mother of the child:

CASE XIV. *Tenpenny Nail.* Henry Lava, aged 8 months, swallowed, in 1848, a tenpenny nail. The child had at the same time a hernia. In two days it was distinctly felt in the hernial sac, and a surgeon pushed it from the sac back into the belly. In two weeks more it passed the rectum, having never occasioned any inconvenience to the little patient.

In connection with which it may be well to place the case found in the London Med. Chi. Rev., vol. iii, (1825), second ser., p. 301:

CASE XV. *Iron Nail.* "A child, 18 months old, at Pembroke Dock, swallowed an iron nail about an inch long, having a rough head. Strong convulsions soon followed, and then spontaneous vomiting. These subsided, and on the fourth day the stools became black and evidently ferruginous, with retention of urine. This last symptom being relieved, the child went on till the seventh day, when vomiting and convulsions again recurred. The same train of symptoms took place once more on the fourteenth day; after which the child suffered no further inconvenience, and perfectly recovered its health. The black stools never appeared but once, and the nail could not be detected in the motions."

CASE XVI. *Brass Button.* Edward R., 2 years old, of Buffalo, swallowed a small brass button, Feb. 9, 1853, and passed it on the 2d June, 1853, having retained it about four months. He took no medicine, and suffered no inconvenience from it. It was discolored when he swallowed it, but quite bright and polished when it came away.

CASE XVII. *Glass Door-knob.* Dr. S. has informed me that when 8 years old, he swallowed a portion of a glass door-knob; the knob being a little broken so that it was irregular in form, some of the angles being quite sharp. Its longest diameter was a little more than one inch, and its shortest three-quarters of an inch; weighing 162 grains. He took castor oil every day, for three days, and kept still. On the third day it passed. He never

experienced any inconvenience from it, except that on the first day there was a sensation of weight in his stomach. A few years ago Dr. S. kindly sent the knob to me for examination, and I can confirm the correctness of his statements as to its size, form, &c.

For the following references to examples of metallic or other hard and indigestible substances received into the stomach, this society is indebted to Messrs. Gilbert, Monahan, and Harvey, medical students:

Bone in Stomach; treated by muriatic acid; recovery. Lon. Med. Chi. Rev., old series, vol. i, p. 480.

American Knife Eater; death. Ibid, vol. iv, p. 218.

Accidental Knife Swallowing; death. Ibid, 2d series, vol. ii, p. 476.

Copenhagen Needle Patient. Ibid, vol. iii, p. 559.

Iron, Steel, Pewter, &c., in Stomach of a Lunatic. Ibid, vol. xxxiv, p. 456.

Iron Spoon; death. Edinburgh Med. & Surg. Jour., vol. xxxv, p. 224.

Piece of a Delft Plate; death. With remarks, &c. Ibid, vol. xxxvi, p. 56, (1831.)

Accumulation of Cotton in Stomach; removed by emetics, &c.; recovery. Buffalo Med. Jour., vol. v, p. 741.

Thirty-eight pieces of various hard substances, including two Compasses and a Knife. Idiot boy. Death. Philosophical Trans., Jores abridgement, vol v, p. 278.

Piece of Slave, nineteen inches long, twenty-two other pieces of wood, &c. Death. Dictionnaire des Sciences Méd. Art. Cas Rares.

Knives Extracted. Ephémérides, Dec. 2, Ann. 10, art. 9, L'Histoire de Prusse, Partie 2.

Silver Fork Extracted; recovery. Rapport des Travaux de l'Académie Royale de Méd. de Bordeaux, Ann. 1828.

Bleeding of Stomach from mechanical causes: such as Pins, Blades of Knives, &c. Resulting in Death. Acts of the Med. Soc. of Berlin, vol. i. p. 53. Nouvelles de Repub. de Lettres, art. 10. Bonetus, Sepulchretum Anat., Lib. 3, sect. 44.

(Two cases of Calculus in appendix vermiformis; ulceration; death. Amer. Jour. Med. Sci., vol. xxxi, p. 122; also vol. xxxii, p. 196.)

Silver Spoon; excision from intestines. New York Med. Repository, vol. x, p. 367. 1807.

Lead Bar, ten inches long. Gastrotomy. Recovery. Operation by

Dr. Bell, of Wapello, Iowa. Med. Examiner, vol. xi, p. 183. Philadelphia. 1855.

One pound and nine ounces of Pins. Death and autopsy. The Med. Exam., vol. x, p. 123. 1854.

Various articles. Brodie's Clinical Lectures, p. 172.

See also, Liston's Surg., by Mutter, p. 332. Gibson's Elements of Surg., vol. ii, p. 53. Ohelius's System of Surgery, with Notes, by South, vol. lii, p. 102.

Mr. Jansen, also relates that John Hen swallowed a gold breast pin. His brother advised him to eat as much as he could of "pate de pain d'epices," a very tenacious dough. Two days afterward he passed the pin entangled in hardened feces.

These do not constitute all which a careful and thorough examination of the journals and books would probably bring to light, and I wish that some one who has both the leisure and the inclination, would arrange and analyze them all so as to make them useful for reference and study.

I must not omit to relate to you before I close, one most remarkable case, but which you will not find in the books:

A boy had swallowed a silver dollar. None of the faculty could devise any mode of relief, whereupon the inventor of the Cure-All was sent for. "It is evident," said he, "that so considerable a coin can never be thrown up by any drug known to science, but you shall witness soon the surprising efficacy of my invention." The medicine was administered in some West India treacle, and an hour afterward the boy threw up the dollar, but in small change, principally in five cent pieces.

Dr. Strong stated that he was acquainted with an instance of a child who had swallowed an old cent, occurring in his own practice, the circumstances of which were so remarkable, that he would furnish a detailed account of the case, to the secretary, for publication.

Dr. Boardman would call attention to the case of Mr. Flersheim, in Prof. Hamilton's report. He had seen Mr. F. two years after he had swallowed the coin; he then had no knowledge of having passed the coin, and had experienced no ill-effects therefrom.

The members of the society expressed their opinion in regard to the swallowing of foreign bodies, more particularly metallic substances, and furnished cases as follows:

Dr. Eastman, some time since, saw a child five or six years old, who had swallowed a cent of the old coinage; the penny remained there three days

without producing any unpleasant effect. The Dr. desiring to remove the coin, gave mild cathartics, and on the fifth day the cent came away, without inconvenience and having produced no ill effect. The remedies were resorted to, as Dr. E. deemed it prudent to get rid of the foreign body.

Prof. Hamilton does not think the old copper penny ever proved injurious, except by producing mechanical obstruction.

Dr. Miner was called to see a boy aged three or four years, who had swallowed an old penny; no ill effects were manifested; no medicine was given; cannot say, whether or no it passed away.

Dr. Newman related the case of a child, 3 years old, who had swallowed a button, a common brass coat-button; there was slight nausea. Dr. N. advised a hearty meal and a dose of oil; button came away in three days, having produced no unpleasant symptom.

Dr. Treat knew of a child who had swallowed a piece of lead; advised parents to wait, and it would work its way through, by its own weight; it passed in due time.

In connection with the passage of bodies by their own weight, he related an anecdote which Dr. Musser was in the habit of telling his class: "A man was so situated that he found himself in need of a cathartic, and no medicine was to be had in all the country round. The old lady where he was stopping, becoming acquainted with his necessities, retired and shortly came into the room with a bowl full of water in which there was rolling a bullet. 'What's this?' said he. 'Oh! do n't be afraid of it,' says she, 'it'll cure you; swallow it; *it has been through me three times already.*'"

Dr. Ring reported a case of a boy, 6 years of age, who had swallowed a Spanish quarter; had some difficulty in swallowing it; had pain in oesophagus; bread was given, which forced the coin down into the stomach; it produced no injurious symptoms, and came away on the third day, or sixty hours after he had swallowed it.

Prof. White referred to the popular impression in regard to the new cent, and the value of the cases reported as tending to dispel it. Prof. W. then reported the case of an infant, ten months old, who swallowed a new cent; no medicine was given; it passed through the following day. Also, another case in which the new cent was not corroded. Still another case in Orleans Co.; there was no corrosion of the new cent; no unpleasant symptom was manifested. Prof. W. further stated, that large bodies pass through the intestines without injury. A child swallowed an old cent; it passed through him in two or three days, without any ill effects. The case of Capt. M., was very remarkable, and he would relate it as told him by the Capt. Hav-

ing been shipwrecked, and desiring to preserve a *bull's eye watch* which he prized highly, he swallowed it, and in due time it came away. Not wishing to lose it, he swallowed it the second time, and a *second time* it passed through him; both times without pain or inconvenience.

As to the propriety of giving remedies, Prof. W. was of the opinion that emetics should not be given, as there was little likelihood of removing the foreign body by means of them. Cathartics he would not advise, unless constipation existed or was produced.

Dr. Boardman stated, that a friend of his, had informed him of the case of a German, whom he saw near Rochester, last July; this man made his living by the money given him for swallowing pebbles. The day previous he had swallowed 172 pebbles; at that time, he swallowed a handful of ordinary sized pebbles. There could be no deception nor sleight of hand, in this instance. The stones passed through him without the aid of remedies.

(The President, Dr. Flint, appeared, and took the chair.)

Dr. Hutchins related the case of a gentleman who takes pebbles as food. He reported the case of a man who swallowed a piece of copper about the size of a prune; it came away in two days, without creating any pain in the dejection.

Prof. White coincided with Prof. Hamilton in regard to the danger being entirely from mechanical obstruction in the vast majority of cases; and thought that generally no treatment would be required.

Prof. Rochester reported a case of a child, 4 years old, who had swallowed a piece of brass, commonly called, a token; no unpleasant symptoms were produced, and in due time it passed away.

Prof. Hamilton thought that when an angular body had been swallowed, cathartics would prove injurious; when the body was round, it was not material whether a cathartic were given or no; probably the substance would pass through sooner without one than otherwise.

Dr. Baker reported the case of a patient, three or four years old, who had swallowed a new cent; no inconvenience resulted; no medicine was given; he does not know whether it passed or not.

Prof. White reported an interesting case in which he employed a novel method of arresting *rectal hemorrhage*. Patient, male, æt. 26 years, applied to him last winter. Examining him, with Prof. Moore, found a rectal fistula; he had had attacks of hemorrhage from rectum, but small in amount. An operation was made by cutting from within; the discharge diminished, and the patient improved very much in general appearance; but the cure was

not perfect. In June last, patient returned; and Prof. W. discovered another fistula high up in rectum, the lowest point being about $1\frac{1}{2}$ inches from anus, and the highest $2\frac{1}{2}$ inches; it was a sub-mucous fistula. Resolved to operate; at 3, P. M., cut mucous membrane alone, with knife; left patient quite comfortable, having little or no hæmorrhage. At 6, P. M., was called in haste to patient, who had just passed a large quantity of blood; applied cold; soon after, patient had another copious dejection of blood; applied a large roll of cotton to rectum, having enclosed in it a lump of ice. Bleeding continued; syncope came on. There was no external hæmorrhage, but great internal hæmorrhage. Called in neighboring practitioners. Procured a glass tube about an inch in diameter, smooth and open at both ends, which he had been in the habit of using in his obstetrical practice; passed this up the rectum, and making a common *kite-tailed tampon*, filled the rectum as full as possible with it, passing the pieces of lint up through the tube. This arrested the hæmorrhage completely. About twenty-four hours thereafter, removed the tampon; patient had two large dejections of grumous blood, followed by much relief. In this case, the mucous membrane only was cut, yet the hæmorrhage was severe; it was not rapid, but continuous, and proceeded from many minute vessels.

Prof. Rochester reported a case of *perforation of the appendix vermiformis*, followed by peritonitis, and death. Has reported already five cases of this nature, resembling each other very much. This patient was seen in the afternoon; had had slight diarrhoea since morning; was not seen for two days, parents not deeming it necessary, as there appeared to be not much the matter with the patient. When seen next, had general peritonitis; was taken on the 5th of the month, and died on the 8th. Great tenderness existed over the entire abdomen. Prof. R. noticed in this case the same circumstance which he had witnessed in some of the other cases of perforation; during a paroxysm of severe pain, the patient would rise in bed and throw himself violently on the abdomen for relief, like occurs in cases of colic. It is well to observe, that since the decease of this patient, an uncle has had circumscribed peritonitis, but recovered. An aunt had previously died from peritonitis. And the boy himself had had an attack of peritonitis four years before.

Post-mortem conducted by Dr. A. W. Nichols, about twenty hours after death. Evidences of general and acute peritonitis were found. Fæcal matter in lower portion of abdominal cavity. No perforation was found except on one side of the appendix near to the terminal extremity. The appendix

was quite firmly adherent to the rectum. Being carefully separated and the cecum removed, several small perforations were discovered; this portion of the appendix was enlarged and appeared gangrenous. A hard body occupied its cavity. On laying open the appendix, a hard, oval mass, about the size of a common bean was discovered: this consisted of fecal matter arranged concentrically around a nucleus of several stony particles of the size of a pin's head.

Prof. R. thinks this case of peritonitis more common than has generally been supposed. He finds the literature of this subject meagre. Rokitsansky speaks more fully of disease of the appendix vermiformis than any other writer. He states, that perforation of this portion of the intestines, is not an infrequent occurrence. Besides arising from obstruction as it does usually, it may occur in the course of typhus fever, tuberculosis, &c.

Prof. Hamilton had seen in the medical journals, two cases of gall-stones producing perforation. Was not this case of like nature?

Prof. Rochester thought not.

Dr. A. Flint, Jr., then read the following report:

Case of Poisoning by Syrup of Poppies and Belladonna.

CASE I. The patient was a son of Mr. P., aged two years and six months. He had always been healthy, with the exception of a mild attack of rubeola, from which he was then convalescing. At a quarter to 1, P. M., July 23d, it took, as nearly as could be estimated, an ounce of a mixture of belladonna and syrup of poppies, in the proportion of a grain to the ounce. At half past 1, Dr. Baker saw the patient and administered an emetic of gr. x, zinci sulph., without effect. He then directed some mustard and water, followed by three to four tumblers of tepid water. This also failed to operate. Dr. Lockwood, the family physician, and myself, saw the patient at 3, P. M. Before the arrival of Dr. Lockwood the nature of the poison was not known. We found the patient comatose; prolabia and face much swollen; great difficulty of deglutition, and loss of vision (as far as we could ascertain); on examining the condition of the pupila, we were surprised to find them entirely natural. Another emetic of 10 grs. of sulphate of zinc was immediately administered, but without producing the desired effect. In about thirty-six minutes, 10 grs. of ipecac was given, though it was forced down with great difficulty.

The symptoms gradually increased in severity; the breathing became more labored, and deglutition was now impossible. At about 4 o'clock a

full enema of molasses and water was given, and an attempt was made to administer some carb. of ammonia, but the strangling and distress was so great, when any fluid was in the mouth, that it was thought advisable to desist. The breathing was now accompanied by a loud tracheal r le, with frothing at the mouth and nostrils. Pulse very irregular, now soft and slow, now hard and frequent. Still no contraction nor dilatation of the pupils.

Directed sinapisms to the extremities, abdomen, and whole length of the spine. (These were allowed to remain for four or five hours without any apparent effect, though two days afterward the spine was found extensively blistered. All other measures were suspended.

Saw the patient with Drs. Lockwood and Baker, at 6, P. M. The condition was much the same as at the last visit. The same symptoms, certainly not aggravated, and possibly a little moderated. Pulse 160. Directed another enema, as the first had not operated. This operated freely in a few moments.

Saw the patient again at 9, P. M. No perceptible alteration. Still starter and frothing at the mouth. As it was impossible to administer any remedies, the patient was left to himself for the night.

Saw the patient at ten the next morning, and received the following account: He continued in the same condition in which we left him last night, until about 1 o'clock, when he experienced a change for the better, and continued steadily to improve until we saw him. Dr. Baker called between six and seven in the morning, and Dr. Lockwood at eight, finding the patient very much better. At the time of our visit he was nearly as well as usual. The swelling of the lips and face had entirely disappeared, and his appearance was so much changed that he would not have been recognized. The loss of vision, difficulty of respiration, and deglutition, &c., had entirely disappeared. The pupils were natural, and had not been affected during the entire illness, special attention having been paid to this point.

The above case seems to present points of more than ordinary interest, and I have, therefore, reported it more fully than would at first seem necessary. The great point of interest is the variation of the symptoms both from those of a case of poisoning by belladonna and a case of poisoning by opium.

In Christison's work on poisons, the chapter treating of "compound poisoning, I find a report of the following case:

CASE II. "A lady who used a compound infusion of opium and belladonna as a wash for an eruption on the vulva, took it into her head one day to use the wash as an injection; and actually received three successive injec-

tions, containing each the active matter of a scruple of opium and half an ounce of belladonna leaves. Fortunately none of the three was retained above a few minutes, except the last, which was not discharged for ten minutes. In less than an hour, she was found in bed asleep, but the true cause was not suspected till three hours later. She was then completely insensible and motionless, with the face pale, the pupils excessively dilated and contractile; the pulse frequent and small and the breathing hurried. After the use of purgative injections, blood-letting, leeches to the head, and sinapisms to the legs, she began, in five hours, to show some signs of returning consciousness, which improved after a fit of vomiting. When thoroughly roused, her vision continued dim, the pupils excessively dilated, and the ideas somewhat confused. For three days the pulse continued frequent, and the pupils somewhat dilated. Here the opium appears to have prevented the delirium usually induced by belladonna in the early stage, while on the other hand, the belladonna prevented the usual effect of opium on the pupils, and actually produced the opposite action."

Cases of poisoning by belladonna, are not often met with, but I have found reports of two very interesting and distinctive cases: one in the Buffalo Medical Journal for July, 1848, and the other in the American Journal for July, 1857. I shall give a condensed account of the symptoms of these cases, so as to be enabled to compare them with those of the cases just related.

CASE III. Buff. Med. Jour. This case occurred at Black Rock, in the practice of Dr. Dayton, and was seen in consultation, by Drs. White and Flint. It was estimated that the patient took two or three ounces of the extract of belladonna, which was prepared by the Shakers, and labelled by mistake, ext. of taraxicum. He shortly complained of vertigo, impaired vision, with dryness of the throat and fauces, and Dr. Dayton was called to see him; he found the pupils very much dilated, and suspected poisoning by belladonna. He administered an emetic of sulphate of zinc and ipecac, which operated satisfactorily; sinapisms were applied to the extremities.

About five hours after taking the poison, Drs. White and Flint saw him. The countenance had become bloated; the mind, which was confused when Dr. Dayton first saw him, had become more affected, the patient replying to questions incoherently and frequently, in a ludicrous manner. There was also great difficulty of deglutition, loss of vision, and disposition to sleep. Carbonate of ammonia was given frequently, and continued throughout the night. Seven hours after taking the poison he could easily be roused, the

other symptoms remaining the same. He progressively improved from that time, and by the next morning had nearly recovered.

CASE IV. American Journal, July, 1857. This case was recorded by Dr. Wm. Jenner. Poisoning resulted from the continued application of a belladonna plaster to the skin. The symptoms of this case do not differ materially from those of the preceding. There was vertigo, dryness of the throat; loss of vision; great dilatation of the pupils; peculiar delirium; and added to these, a frequent desire to micturate, passing only a few drops of colorless liquid. There is no mention made of bloating of the face.

The treatment was a blister to the back of the neck, an aperient and five grains of carb. of ammonia, every two hours. The patient recovered, and was nearly well on the following morning, though he experienced dimness of vision, and impairment of memory, for several days.

The symptoms of these cases accord very nearly with the description given by Christison in his work on poisons. The delirium is there described as of the pleasing and ludicrous kind as was observed in the cases I have mentioned; dryness of the throat, and difficulty of deglutition are mentioned as pretty constant. In all cases, there is dilatation of the pupil: this is regarded by every one as the most distinctive mark of poisoning by belladonna.

Such cases rarely terminate fatally if they be seen in time to employ the appropriate remedies; when occurring in children, however, they appear to be most serious. Two fatal cases are quoted by Dr. Christison, occurring in children, and terminating within twenty-four hours.

I also find a report in the American Journal, copied from the Lancet, of Aug., 1846, where several persons ate of the belladonna berries, which had been sold as "nettleberries." A man and his wife and two little boys are mentioned. The man, who took them made into a tart, died from the effects of the poison; his wife, who did not eat so heartily, recovered, but labored for some time from its effects. One of the children died on the same day, and the other recovered. No detailed account of the symptoms was given.

The most judicious course of treatment in such cases, is the following: First it is desirable to evacuate any of the poison which may remain in the stomach, by an emetic of sulphate of zinc, ipecac. salt and mustard, etc., the first being preferable as its safest and most speedy in its action. The extremities are generally cold, and the patient will usually be benefited by the application of sinapisms. In some cases a blister to the back of the neck or a sinapism along the spine, will relieve a tendency to determination of blood to the head. Christison recommends, in certain cases, the loss of blood from

the arm; in this of course we must be regulated by the pulse, etc., as in other cases where bleeding is resorted to. It is desirable, also, to procure an evacuation from the bowels as soon as possible.

The administration of the carb. of ammonia is generally resorted to with most happy results; it is recommended by Christison, and we have seen, was administered in cases 2d and 3d, with most gratifying effect. This may be given in doses of five grains every one or two hours, while the patient labors under the effects of the poison. The prognosis is generally favorable.

I have not, of course, attempted to give anything like an elaborate or complete account of the symptoms, treatment, &c., of poisoning by belladonna; but I have merely endeavored to give a sufficiently full account of the two cases which I have quoted, to enable us to make a comparison with cases 1st and 2d.

The quantity of opium estimated to be contained in the amount of syrup of poppies taken by the patient in Case I, is a grain and a half. In a child two years old, this quantity might, and probably would produce, alarming symptoms. Repeated instances are on record of death from five or six drops of tinct. of opium, taken by infants; and such is the peculiar activity of the preparations of opium when administered to young children, that it is always given with unusual care. The quantity of belladonna which was taken in this case, was one grain; this is more than the ordinary dose for an adult, but though a little more than the ordinary dose produces unpleasant symptoms, and though frequently we have them following the administration of a small dose, yet from an examination of the cases reported by Christison and others, we find that a proportional increase of danger is not met with when very large quantities are taken. The fresh berries are most active; and the fatal cases occurring in an adult and a child, mentioned in the American Journal, resulted from taking the poison in this form. In the two fatal cases occurring in children, mentioned by Christison, it was not noted in what form the belladonna was taken. It seems reasonable to suppose that the danger to the patient in Case I, was mainly due to the opium; while the belladonna impressed peculiarities on the case which made the symptoms nearly resemble those which we see in poisoning by this article. By comparing this case with the cases of poisoning by belladonna alone, we will see many identical features, while two of the most important diagnostic marks of poisoning by belladonna are lost, namely, delirium and dilatation of the pupils. In almost all, if not all cases of poisoning by belladonna, we have delirium in the early stage; this might not have been so marked in a child, but still we would probably have had some approach to it, before stu-

por set in, instead of an immediate lapse into a state of insensibility, which is generally the case in poisoning by opium. Again, we *always* have dilatation of the pupil in poisoning by belladonna, and this was wanting in case first, the pupils remaining natural during the entire illness. These two points, with an amount of danger to the patient which we could not have had simply from a grain of extract of belladonna, distinctly mark the influence of opium.

The prominent symptom which we had in common with most cases of belladonna poisoning were, swelling of the face, which was noted in Case III, but not in Case IV, great difficulty and finally impossibility of deglutition, which does not exist to so marked an extent in poisoning by opium, and loss of vision.

Case II is the only other case which I have seen, of poisoning by a combination of opium and belladonna: in this case the pupils were very much dilated, and remained so for two or three days, showing that the opposite influences of these changes on the pupil, do not always counteract each other, as in Case I, we would be led to conclude from the special influence on the iris, which belladonna always exerts, whether administered internally or applied to the vicinity of the eye, that in such a case as this, it would be likely to predominate; we can of course form no definite opinion from our present data, having but two cases and those conflicting with regard to this point; but in Case I the opium certainly counteracted the influence of the belladonna on the iris, or vice versa.

Some one has suggested that belladonna be employed as an antidote in cases of poisoning by opium. I am not aware that there was any reason for surmising a favorable effect, excepting the antagonistic influence on the pupils, to which I have just referred. The cases which I have quoted do not certainly show any beneficial influence from the belladonna, but on the contrary, several distressing symptoms not incident to poisoning by opium, were superadded.

Dr. Lemon reported the following case:

Fracture of the right "os frontis," with depression; no coma; spontaneous restoration; recovery.

August 12, 1857, at 9, A. M., Adaline Roach, aged 7 years, fell through the skylight to the ground floor of a four story building on Commercial street, striking on the right frontal eminence. She was taken up pale, and cold, but not unconscious. The depressed portion of bone was in extent the

size of a half dollar piece. No external wound other than a contusion; effusion of blood from the left ear; under lip nearly cut through; fracture of the olecranon process of the right ulna. She was very restless; complained of pain in the abdomen, and shortly vomited a great quantity of blood along with the contents of the stomach.

At P. M., reaction had ensued, and she is was in high fever.

Saw her again at eleven; still complains of the abdomen; expresses a desire to void her urine but cannot accomplish it. Considering that she had not urinated since morning early, I introduced a No. 6 catheter and drew off about half a pint of water, upon which she expressed relief. She was never comatose at any period of her illness, but all through it was restless and irritable.

For the first few days the tumefaction of the forehead, nose and eyelids, was very great; it gradually disappeared, however, and the depressed portion of bone rapidly resumed its proper place from natural resiliency, and by the twenty-fifth the depression was scarcely perceptible, and she was entirely well, with the exception of the fractured elbow. On her first attempts to sit up she turned very giddy and faint.

Dr. Hamilton has recorded, and reported, in the Buffalo Medical Journal, for November, 1846, five cases of injuries to the head in children, in which there were two with simply depression; two with fracture and depression, in neither of these did coma supervene; the fifth, however, had persistent coma, after fracture and depression. All made a good recovery.

Whilst on this subject I would inquire what amount of importance is generally attached to the effusion of blood from the ear, after injuries to the skull? Is it a pathognomonic sign of fracture of the base of the cranium?

Prof. Hamilton remarked that hæmorrhage from the ear was considered by surgeons, generally, of the present day, as not positively indicative of a fracture; that the subject had always excited a good deal of discussion. He mentioned an instance of a person who fell on a spike, which penetrated the skull, but recovery took place. He had recently seen a case of a child whose skull was fractured, and in which he had to trephine; the child recovered, and in ten days after the operation was running about in the streets.

Dr. Hutchins related a case of a person who received an injury on the head, in which there was hæmorrhage from the ears, nose, and mouth, with diarrhoea. This patient recovered, and left the city in six or seven days. Was there fracture at the base of the brain in this instance?

Prof. Hamilton did not think these symptoms necessarily indicated such a fracture.

Prof. H. remarked, that every year he was more deeply impressed with the truth, that persons in extremity even, frequently recovered. In this connection he would call to mind the following case:

Was called to see a person in Black Rock, who had fractured the parietal bone, and was in a comatose condition. Prof. H. trephined, although he entertained no hope for the patient. Found dura mater elevated by blood; opened the membrane and blood escaped *per saltum* for some time. Regarding case as hopeless, he left; about half pint of blood having been thrown out. Sent for next morning to visit patient; found him much better; bleeding had continued *per saltum* for some time after he left; but the person began to manifest some signs of consciousness, and had been improving up to time of morning visit. This patient eventually recovered.

There being no further business, the association adjourned.

AUSTIN W. NICHOLS,

Secretary *pro tem*.

ART. III.—*A Case of Accidental Swallowing of a Cent of the old coinage.* Communicated to the Buffalo Medical Association. By P. H. STRONG, M. D., Buffalo.

I send you herewith, according to promise, an account from my notes of the case of accidental swallowing, of which I gave an oral and somewhat indefinite statement from memory, at the last meeting of the association. It is one that I had intended to furnish the association ere now. The discussion springing up unanticipated, I was unprepared that evening to give a precise and accurate statement of the case.

Considering the tenderness of the age of the child, with the dimensions of the foreign body, it is believed to constitute a kind of climax in hazardous and yet successful swallowing. I have found nothing (after considerable search) in the records of medicine that quite equals it. Being thus far, perhaps, the ultimate fact of actual achievement in this direction, and, as such, desirable as a matter of reference on the occurrence of like cases, it seems demanded that a detailed and accurate account of it should be placed on record.

Dec. 15, 1856, I was called in great haste to see A. B., aged 2 years and 10 months, son of P. B., Palmer street, in this city, supposed to have swallowed a cent, of the old coinage.

The child was much less than of medium size and vigor of constitution.

He had been considered as quite the most delicate in physical development of any of a family of eight or nine children.

I found the child lying languid, for the most part quiet and unexcited, but occasionally retching with moderate severity, able to swallow with facility, though not desiring, liquids. On asking for the evidence that he had swallowed the cent, I was told by the mother, that he was playing with one by himself and a little one side from the rest of the family; that he was seen momentarily to choke and struggle, and upon their running to him and asking him what he had done with the cent, he (not being able to talk much) pointed into his mouth and throat, indicating that he had swallowed it.

Supposing it a physical impossibility, and deeming the evidence, in his appearance, and from their account, not quite conclusive, and moreover there being no symptoms sufficiently urgent, in my judgment, to demand the introduction of any detective instrument into the œsophagus, I contented myself with merely a digital examination of the cervical portion of that tube. This gave no indications of any thing foreign being lodged there, and I concluded that if swallowed (which seemed dubious) it had passed into the stomach. I prescribed quietude with a free use of albumen of eggs to guard against the possible contingency of poisoning; and held further opinions and action in abeyance for further developments.

The next day the child appeared much the same. Quiet, painless, disinclined to exertion; retching continuing, though not so frequent; some thirst, no appetite; slight febrile movement; unable or unwilling to attempt, to swallow food subjected to mastication, but both willing and able to swallow liquid nourishment, and retaining it afterward for the most part.

I waited upon very much this train of symptoms till the 20th, my incredulity the while gradually giving way. I became pretty well satisfied by that date that the child had actually swallowed the cent, and that it remained lodged in the stomach, though neither during this interval, nor at any time, did he give any indications of suffering from any toxicological properties of the copper, farther than the nausea and retching which were most evident the first two or three days.

Upon the 20th the child appeared somewhat more restless, with considerable loss of vital energy and strength, and increased difficulty in deglutition, even of liquids, and I determined to explore with the *probang*. The instrument was arrested in the region parallel to the lower margin of the thyroid cartilage, and it required considerable and steadily sustained pushing force from this point to a point estimated to be nearly parallel to the lower portion

of the sternum, when the resistance gave way, and as I supposed, the obstructing body passed into the stomach.

Immediately after the operation, the child took quite a piece of dry bread and chewed and swallowed it with avidity, and retained it, which confirmed me in the opinion that the coin was dislodged from the œsophagus.

The retching, however, was resumed soon after, and continued with occasional vomiting, for about a week longer, after which the retching and vomiting were less urgent. The child, however, continued with loss of appetite and in an unthriving emaciating way, till the 12th of Feb., four weeks from the accident, when the cent passed per anum.

All untoward symptoms very soon disappeared, and the child's recovery was complete.

I regret exceedingly that I have not the trophy to present to the association. It was kept for me, and sent to my office, as I had enjoined, but the little girl who brought it, not finding me in, took it back home. It was laid up subject to my call, but upon my calling for it soon thereafter, it could not be found. Suspicion fastened strongly on the grog-loving father, whose bibulous proclivities are supposed to have overmastered all his zeal for facts for scientific purposes, and thus the otherwise famous coin was devoted, for the second time, to an ignoble end.

This report concerning it, however, was and is entirely reliable, and that was that the cent had undergone no change except it was blackened, indicating a superficial oxidation.

The cent of the old coinage is, I believe, nearly pure copper, fourteen lines in diameter, and two lines in thickness, and weighs 167 grains.

The treatment after pushing the coin into the stomach, was to wait upon the unaided and undisturbed powers of nature, which I believe is the advice of the best authorities, with foreign bodies of the shape and size of this.

Instances are abundant in which older children by a year or two and more, have swallowed the cent, and its equivalent in size, of other bodies, and also others as young and even of more tender age, have swallowed the dime, the new cent, and other coins and buttons of about the same size; but none of which I am aware have been quite so extraordinary. In being called to like cases where distress and anxiety is so great and pervading, I believe it is the common experience of the profession, that next to the pleasure of removing at once and completely the offending body, is the comfort and satisfaction of being able to refer to authentic records of successful results in cases of as bad or even of worse character, when prompt extraction or removal was precluded. In the hope that the present case may at least serve

some one this *second* grade of satisfaction and profit, I now submit it to the association.

P. H. STRONG.

BUFFALO, Sept., 1857.

-
- ART. IV.—*Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity, AUSTIN FLINT, M. D., Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. VII. *Acute Lobar Pneumonitis.*

During the past winter and spring, several cases of pneumonitis occurred at the hospital, presenting, during the course of the disease, many interesting and important points pertaining to the signs and symptoms, duration and treatment, of this disease. Seven of these cases were instances of simple acute lobar pneumonitis; and two others were instances of inflammation of the lung supervening upon probable tuberculous deposit.

At the risk of tiring the reader, we will at this time enter into a brief discussion of certain signs and symptoms presented ordinarily in the course of pneumonitis, and present a few diagnostic features of this disease; leaving for a subsequent article, the more interesting subject of the treatment of inflammation of the lungs.

In simple acute pneumonitis occurring during adult life, it is an interesting and important fact, that the inflammation is almost always confined, at first, to the lower lobe of either lung. The signs consequently presented on physical examination of the chest, are very different and distinctive according as we conduct the exploration over the affected or unaffected portions of the lung on the same side of the chest. Is it practicable, then, in the great majority of cases, to demonstrate by means of a physical examination of the lungs, the precise limits of the affected tissue? It is, and with comparative ease. The signs by which we are enabled to draw a line of demarkation on the chest, and to assert that *here* is inflamed lung and *there* healthy lung, are readily recognized and are presented in almost every case of this variety of pneumonitis during each stage of its course. These physical signs are furnished by recourse to percussion, to auscultation of the respiration, of the voice, and of the whisper, and to inspection.

On percussing over the affected portion of the chest, namely, the lower

lobe of one lung, it is highly important to remember that, in place of flatness or dullness, which signs might be expected from a lung more or less solidified, there is frequently present a tympanitic sound more or less intense. This resonance may be more intense and clearer than that produced by percussing over a corresponding part on the unaffected side of the chest, yet it is *high* in pitch and *metallic* in quality. The tympanitic resonance is more commonly found anteriorly and laterally, than over the scapula below the ridge: in the latter situation, we usually meet with dullness or flatness. Occurring in cases of pneumonitis affecting the lower lobe of the left lung, the tympanitic resonance may be due to distension of the stomach with gas; but, tympanitic resonance, not so acute in pitch nor of such metallic quality, exists in the above location, when there is no tympanitic sound on percussion over the stomach. Over the upper lobe on the affected side, it is necessary to observe, that the percussion-resonance is frequently modified; and that there is often so much modification of the vesicular resonance, as to give rise to that resonance described as "*vesiculo-tympanitic*."* Now, it is only necessary for our present purpose, to know that at a certain line running diagonally across the chest on the affected side, the percussion-resonance from below upward suddenly changes at this line from tympanitic, and is found to become more or less vesiculo-tympanitic. This change in the quality of the resonance, is so abrupt usually, that we are able to trace with great accuracy the lines of demarkation between healthy and morbid lung.

But, to show still farther the accuracy of physical signs, and to exhibit the correlative value of some of them, attention may be directed to the signs derived from auscultation, in regard to the above point. In the first place, we may state, that "it not infrequently happens that, over the small portion of the lower lobe which extends in front, auscultation fails to detect any morbid phenomena." - "Posteriorly and laterally, if the stethoscope be employed by passing the instrument over successive portions of the chest from above downward, the change from the vesicular murmur to the bronchial respiration is found to be abrupt, not gradual. If the line indicating the situation of the interlobar fissure have been already traced by the change in the percussion-sound, the transition from the vesicular murmur to the bronchial respiration will be found to take place on the same line. The limits of solidification may thus be defined by auscultation as well as by percussion, and it is in some cases easier to trace the boundaries by means of the former

* Flint on Respiratory Organs, p. 106. Vesicular respiration not abolished, but modified by tympanitic qualities. n.

than by the latter method. On the back, the characters of the bronchial respiration are shown in striking contrast by auscultating alternately above and below the spinous ridge of the scapula."*

Furthermore, the sounds elicited by the articulated and whispered words, furnish additional and confirmatory evidence in regard to the accuracy of the line drawn by means of the foregoing signs of percussion and auscultation, and denoting the inter-lobar fissure. Below this line, bronchophony usually exists; above, exaggerated vocal resonance. But, the *puff* or *souffle* of the whispered words, often becomes as distinctive as any of the previous physical signs; in other words, the change in the character of the sound above and below the line of inter-lobar fissure, appear more abrupt and is more marked. This is noticed not only in front, but also behind over the scapula. Applying the stethoscope over successive portions of the affected side of the chest, from below upward, the sound of the whispered words is found to be quite intense and *high* in pitch; but, at a certain line, in front and behind, the *souffle* becomes changed abruptly, and is now low and vesicular. In several cases, this alteration in the character of the sound has been so sudden, that the *souffle* obtained from that portion of the chest included in the end of the stethoscope was entirely different from that obtained when the instrument was moved in a contrary direction, above or below the line, the smallest appreciable distance. This sign may then frequently become of importance on account of its delicacy. In every one of these cases in which regard was paid to this sign, it confirmed the correctness of the line previously drawn by the foregoing physical signs.

The line of inter-lobar fissure commencing in front, runs upward and backward, from a short distance within and below the nipple, to about the vertebral extremity of the spine of the scapula.

It will be unnecessary to detail the signs furnished in those cases in which the line of inter-lobar fissure was demonstrated. We will observe, however, that the foregoing physical signs referring to changes in the percussion-resonance, and in the sounds of the respiration, the voice, and the whisper, were so distinctive in four of the nine cases, that this line was drawn on the chest, with ease and accuracy. In one of these cases, the disease had nearly run its course, and the affected lung was returning to a state of health; the examination having been made *three weeks* after date of attack.

In the remaining five cases, this line could not be drawn for various reasons: in one case, the entire lung on one side, was affected; in two cases, no

* Flint, op. cit., part ii, chap. iii.

observations were made in reference to this point; and in two cases, the disease, in all probability, occurred in connection with tuberculosis, and was not confined to a single lobe.

We have a few remarks to offer, respecting the *crepitant and sub-crepitant râles*, and the *crepitant râle redux*. Some observers have denied that this râle exists in the majority of cases of pneumonitis, and consequently have thrown doubt on the value of the crepitant râle as a pathognomonic sign.

In these nine cases, the crepitant râle was heard in *five* cases; the sub-crepitant râle in *three*; the crepitant râle redux in *one*; and no râles in one case. The crepitant râle was noticed in these five cases as follows: in one, seven days after the attack, at end of a forced inspiration, in the lower axillary region, and not elsewhere; in one, nine days after date of attack, just below the angle of the scapula; in one, five days after date of attack, over scapula below ridge; in one, eight days after attack, faint and at end of inspiration, below scapula. In another case, the sub-crepitant râle had previously existed, accompanied with considerable expectoration of blood and mucus; as the expectoration diminished and became less bloody, the crepitant râle took the place of the sub-crepitant, being heard well-marked and at the base of the lung behind; it was first observed eight days after date of attack; and was not heard after ten days from date of attack.

In three of the four cases in which the crepitant râle was not heard, the disease had been existing several days prior to the admission of the patient: and when the chest was examined, the physical signs showed the lung to be returning to a condition of health. In the remaining case, the disease had existed eight days, (in connection with tuberculosis, probably,) and no râles were heard. So that, the fact of the occurrence of the crepitant râle in only five of nine cases, does not go to disprove the great value of this sign in diagnosis, as regards its frequency. But, these cases show—if any thing—that this râle is generally heard in the first stage of the inflammation, and before there has been a very great amount of solidification; and that this râle may vary greatly in intensity and in continuance: being sometimes very loud, near the ear, and occupying a great portion of the inspiration; and at other times, faint, remote, and heard only at the end of a forced inspiration. Besides, it requires, not infrequently, a careful examination of the chest to discover its situation; generally existing over or just below the scapula, and sometimes only during forced inspirations.

In regard to the frequency of the crepitant râle redux, this sign was heard in a single case. The disease had existed three weeks, and the physical

signs furnished evidence of the lung returning to a state of health: a well-marked crepitant râle was heard at the end of a forced inspiration just below the scapula.

In reference to the continuance of the crepitant râle through the entire duration of the disease, or its disappearance and subsequent return as the crepitant râle *redux*, Dr. Flint states, that "the observer who seeks by daily explorations during the career of pneumonitis to verify the *crepitant râle redux*, will very often meet with disappointment. The crepitant râle, as just stated, may continue through the whole course of the disease. It may disappear and reappear at irregular intervals. I have known it to become more marked after the lapse of several days, than at an early period in the disease."

The sub-crepitant râle was found to exist in three of the nine cases: in one, there was a large quantity of bloody expectoration, on the decrease of which, on the fifth day of the attack, the sub-crepitant râle gave place to a true crepitant râle; in the other two cases, the disease had existed seven and twelve days, respectively; and in both cases, there appeared to be a considerable amount of expectoration. "The sub-crepitant râle is much more likely to occur at a late period in the disease, during the progress of resolution. Developed under these circumstances it is, in fact, the returning crepitant râle of Laennec. But, its appearance is by no means constant."

Inspection sometimes furnishes signs of more or less importance, in pneumonitis. We refer more particularly to the expansive movements of the two sides of the chest, excepting those cases of pneumonitis in which the movement of the affected side is instinctively restrained on account of the severity of the pain, these cases furnished evidence in favor of the opinion that the affected side, in simple acute lobar pneumonitis, does not expand equally with the healthy side. Grissolle is of the opinion that there is no disparity between the two sides in regard to the amount of expansion. Dr. Flint states, that "a disparity in expansion-movement at the inferior portion of the chest is sometimes obvious, and in other instances not apparent." "It is more marked if the breathing be labored, or voluntarily forced." Again, "the deficient expansion of the affected side when pain has ceased to be a prominent symptom, in other words in the second stage, is attributable to the augmented size of the lung, and the loss of its contractility."

Of these seven cases of simple acute lobar pneumonitis, there was a greater amount of expansion of the healthy side, in five cases; this was first observed as early as the second day in one case; and in another instance not until the ninth day. It was noticed in all the cases, on the first examination of the

chest. In the two cases probably complicated with tuberculosis, the difference in mobility of the two sides, was observed at an early period of the inflammation. In all of these cases, the disparity was rendered more evident on forced breathing; and in most of them could be detected readily during ordinary breathing. In a few instances, not only were the superior and inferior costal types of breathing greater on the unaffected side, but likewise the abdominal type.

An interesting question here arises: how long after the cessation of the inflammation, does the affected lung furnish any physical signs retrospective of pneumonitis? We are able to furnish the results of examinations made in two cases, a considerable time after the date of the attack. In one case, the disease had pursued its course and terminated in recovery without any medication, and under very unfavorable hygienic conditions; an exploration of the chest made twelve days after date of attack, revealed signs distinctive of lung returning from a state of solidification to health. In the other case, the examination was made twenty-one days after date of the attack. The physical signs, in the latter case, were as follows: no apparent disparity in mobility on the two sides; the percussion-resonance over the lower lobe of left lung, (the affected lobe,) was still tympanitic, and the line of inter-lobar fissure could be traced readily by the abrupt change in the character of the resonance, from below upward; a true crepitant r  le redux was discovered at the end of a forced inspiration, over the left side of the chest below the scapula; broncho-vesicular respiration existed over the left inter-scapular space, but ceased abruptly at the level of the third dorsal vertebrae and opposite the vertebral extremity of the spine of the scapula; the whispering souffle was still distinct and high-pitched on the left side below scapula and not appreciable on the right side. As far as the above case is concerned, it may be practicable to determine the prior existence of pneumonitis, after a lapse of three weeks from the time of attack.

We have presented a few points of interest relating to the physical signs in pneumonitis, as derived from a revision of nine cases. Most of the signs which have been the subjects of this discussion, have been matters of dispute with different observers, and are still so to some extent. These cases have been introduced, merely, to show the facility with which we are able to determine the precise extent of the affected lung in pneumonitis. They may serve, likewise, as additional testimony in favor of the presence of certain physical signs in the great majority of cases of simple acute lobar pneumonitis.

ART. V.—*A Case of Urticaria, induced by the Ingestion of the Allium Porrum.* By WM. G. MEACHEM, Warsaw, N. Y.

Sometime in April, I was summoned to the bedside of Master Atwell, aged — years. I found him in the height of a severe paroxysm of dyspeptic colic, the stomach, equally with the bowels, participating in the spasm. Upon an inquiry into the probable cause of the attack, I learned that, upon the day previous to the first appearance of the distressing symptoms under which he was then laboring, my patient, in company with one or more other boys, had eaten freely of the raw leek, which they had found in their rambles through the wood. At once linking together these two circumstances, the ingestion of the vegetable and the occurrence of the colic, as cause and effect, I addressed to the case such remedies as reason and authority dictated. A mercurial cathartic was forthwith administered, calomel being allowed the preference in consideration of the excessive gastric irritability present. An emetic was proscribed, since I had reason to believe that the stomach had already been emptied of its contents. Antodynes were ordered for subsequent employment. The abdomen was fomented with *infusio lupuli humuli*.

Upon visiting him the succeeding day, I perceived that he was nearly covered with the wheals of *urticaria conferta*, the principal seats of the eruption being the loins and the internal aspects of the fore-arms. The characteristic pruritus was unusually developed. In this instance the face, an unusual locality, was also well spotted.

I have been induced to give publicity to this case by the circumstance of never having seen, in standard works upon theory and practice, any specific mention of this variety of esculent as a producing cause of nettle-rash. Quite extended lists of articles of diet capable of evolving this peculiar exanthem are given by various authors, but not one of them, so far as my reading extends, individualizes the *allium porrum*. The frequent occurrence of this tuber in our wooded districts, and the well-known inclination of childhood to freight the alimentary canal with any and every thing that is sapid and masticable, render it highly probable that leeks are much oftener eaten and much oftener occasion attacks of colic and, it may chance be, urticaria, than has heretofore been supposed. In truth, it was but a few days subsequent to the occurrences just narrated, that I prescribed for a married lady who had also made herself a victim of the contortions of colic through identically the same means, the ingestion of leeks, urticaria however, did not ensue in this instance.

What is the essential pathological condition of the exanthem of urticaria? has ever been a query of interest to me, and I here beg the indulgence of the reader while I assay, in a very superficial manner, an answer thereto. In those cases of the disease in which the cause is manifest, for instance, such as are induced by certain articles of diet (and by far the larger number are originated in this way) we have a foundation laid upon which we may build explanatory structures with firm reliance upon their truthful permanence in which we are unable to identify the causative influence, I doubt not that it is the same, or at least, similar, though less readily recognized.

In attacks due to particular ingesta, the cutaneous efflorescence may be accounted for in the following three several ways:

1st. It may be ascribed to the propagation of continuous sympathy from the irritated and inflamed mucous lining of the stomach and intestines.

2dly. The exanthem may essentially consist in active congestion of the sudoriparous and, perchance, the sebaceous glandulæ and the adjacent parts, occasioned by the irritating presence of various constituent principles of the ingesta of which the body endeavors to free itself through the medium of the cutaneous exhalent system.

3dly. The glandular congestion may result from the acridity of new compounds originated within the body, probably in the circulating current, either out of the primitive elements of the same ingesta, or from chemical reaction upon materials already formed, or simply in consequence of the disturbance in function which their presence provokes, which new compounds also seek an outlet through the skin. It may be well here to bear in mind that the the intestinal glands, as well as the cutaneous, assist in the elimination of the various *materies morbi*, and I doubt not that the mucous membrane of the alimentary canal participates, in an equal degree, in the efflorescence, modified somewhat, it may be, by its location. Indeed, authors state that the eruption has been seen in the cavity of the mouth.

I will now briefly consider each of the foregoing hypotheses; and first, the sympathetic influence. It is highly probable that urticaria, in some cases, is a sympathetic manifestation propagated from an irritated or inflamed gastric or intestinal mucous membrane; and this supposition appears the more, reasonable from the fact that those articles of food which are the producing agents of the attacks, are usually of a very indigestible character, peculiarly liable to irritate the *primæ viæ*. The mere mention of some of these substances confirm the truth of the statement. Among them may be named raspberries, strawberries, salted and smoked meats, green cucumbers, &c. The various kinds of shell-fish, particularly muscles, which are so commonly

productive agencies, doubtless owe their energy as such to some idiosyncrasy of the patient, rendering what is ordinarily inoffensive, acrid, and irritant.

As it is needless to delay with the proof of a doctrine so well established as that of continuous sympathy, and as the great similarity, closely approximating identity, of structure in mucous and tegumentary tissues, and their continuousness, are truths susceptible of physiological demonstration, I may dismiss the examination of this first assumed cause with simply adducing a few instances in which this sympathy cannot but be apparent. In intestinal irritation from worms, the labial, nasal, guttural, vaginal, urethral, and anal mucous membranes sympathize, and itching of those parts becomes a prominent symptom, inducing, when located in the throat, a peculiar dry cough denominated verminous. When cough appears the bronchial lining may also possibly sympathize. A purulent discharge from the vagina also sometimes arises in this way.

Again, when the pulmonary membrane is irritated and inflamed, as in catarrh, influenza, bronchitis, &c., the gastric sympathies and indigestion ensues. The same consequences follow in the wake of the various forms of cynanche. In dentition, also, the intestinal lining is sympathetically affected and diarrhoea results. In fact dentition and acidity of stomach are observed causations of urticaria. Now, in the last cases the exanthem is manifestly sympathetically called into being. Why may it not occasionally be similarly caused in other cases? It is true, that in some instances there may be an actual *extension* of the affection from the stomach and bowels to the skin, but in a larger number it is, doubtless sympathetically propagated. The institution of this cutaneous eruption is, indeed, one of the conservative efforts in which nature delights. It is nature's *revulsion*: the external irritation derives from the internal. And herein is seen the wisdom of the substitution, that, whereas the original irritation is in one of the peculiarly vital organs, the secondary is in an organ the interruption of whose function is less immediately hazardous, since its duty can be vicariously executed by the lungs, the kidneys and the liver. It is a cardinal indication, therefore, to encourage, rather than obstruct, the evolution of the cutaneous exanthem.

Let me now turn to the second hypothesis. The arguments adducible in support of this theory, are chiefly to be derived from the physiological character of the skin and from analogy. Physiology asserts that the sudoriparous and possibly the sebaceous glandulæ are conduits of exit for not only the normal waste of the system, but also for such constituents of aliment as are absorbable, but yet unassimilable, or not required by the body. Hence the

conjecture is far from unreasonable that materials of food which excites the disease, may reach the tegumentary glandules in their outward passage, and therein, by their irritating physical or chemical properties, institute congestive action or rather inaction. These materials may be either the saline matters of the food, whose crystals, by reason of their conformation, are peculiarly fitted for mechanical irritation, or acids, both of which are unusually abundant in vegetables, the variety of ingesta most prone to establish the efflorescence. Possibly lactic acid, the normal excretion of the sudoriparous glandulæ, may, in some instances, by augmented quantity or strength, become an excitant of congestion.

I have hitherto denominated the cutaneous eruption active congestion, rather than inflammation; because its characteristics indicate the former much more certainly than the latter. Its usually transient appearance, its sudden retrocession and return, the invariable absence of suppuration, all discountenance the idea of inflammation, but favor that of congestion. The pathology of the distinctive wheals seems to be this: The acrid materials withdrawn from the blood by the secreting action of the glandulæ, mechanically obstruct the calibres of a limited number of adjacent perspiratory ducts, this clogging being aided by the compressing force exerted upon the ducts from without by the increased afflux of blood into the encompassing plexus of vessels. The glandulæ consequently become distended, and hence arise the elevations, denominated wheals. The whitish color of the surface of these protruberances may be due to the pressure made by the distended glandulæ upon the superjacent blood-vessels, partially obliterating their cavities and thereby diminishing the amount of red fluid circulating in them. The generally diffused erythema, out of which, as a bed, the wheals arise, is probably an active congestion of the skin, unaccompanied by obstruction of the perspiratory ducts. This explanation also harmonizes with the sudden disappearance and reappearance of the erythematous blush and the wheals. As soon as the obstructions in the ducts are removed, the tumor must necessarily abate, since there are no deposits of lymph, pus, blood, &c., to be gotten rid of by absorption or otherwise. And equally so with the erythema: When the *vis a tergo* which impels, or the *vis a fronte* which solicits, an active determination of blood, subsides, almost simultaneously will the congestion cease. The peculiar hardness of the tumors might induce the belief that those tumors were depositions of lymph, but the more philosophical reference of that hardness is to distention, which is well known to be attended with this physical quality. A bladder filled to repletion with fluid, presents an apt illustration. If this eruption ever is inflammatory, the inflammation

must be similar to, or identical with, that variety known as erysipelatous, the erratic nature of which is its distinguishing characteristic.

The well-observed fact that more or less serious constitutional disturbance invariably ensues upon the retrocession of the efflorescence, corroborates the opinion that that efflorescence is induced by the elimination of morbid material from the blood, any interruption of which elimination necessarily occasions the retention of that material in the system, and resultant constitutional irritation and fever. Hence, also, with this view of the disease, a perfect development of the exanthem should be sedulously encouraged.

The chief argument derivable from analogy in advocacy of this second hypothesis, is the fact that certain odorous principles of alimentary and medicinal substances are frequently detectable in the pulmonary and cutaneous exhalations, thus demonstrating that certain materials can enter the stomach, pass through the entire round of the circulation, and at last, unchanged, make their exit through one or more of the emunctories. The odors of onions, garlic, the terebinthines, &c., are cases in illustration. Is it not supposable that other less odorous, also less perceptible, may with equal facility accomplish the same circuit.

Again, the profuse evacuations from the skin, intestines, &c., which so often occur coincidently with the period of amendment in idiopathic fevers, and which are designated, critical discharges, strongly confirm the pathological idea that this class of diseases owe their existence to the presence in the blood of a peculiar virus, which is removed from the system by these copious perspirations and diarrhoeas. May not nettle-rash have a similar origin and remedy? May not a morbid material be its cause and the cutaneous eruption, its critical discharge, or rather the effect of its critical discharge?

Let me, in the last place, cursorily examine the third hypothesis, in support of which all, or nearly all, that has been advanced in behalf of the second proposition, may, with equal truth, be predicated. It is from the domain of analogy, however, that we derive our strongest evidences in maintenance of this last theory. The major exanthemata, barring their contagiousness, present many features in common with urticaria, not the least noticeable of which is the efflorescence. Now, these diseases, it is almost universally conceded, are due to the presence in the nutritive current of certain specific poisons, which in their passage through the depurating glandulæ of the skin, excite, in some instances, as variola, inflammation of the tegumentary tissue; in others, as rubeola and scarlatina, active congestion. Is it not as probable

that in at least some cases of urticaria, though not a specific virus, a definite materies morbi may be the productive agent of their peculiar exanthem?

Indeed, there is nothing unreasonable in the supposition that each one of these three alleged influences may, at times, separately prove a causation of urticaria, though, in perhaps a greater number of instances, a combination of two or more is requisite to the origination of the malady. This view of the subject may also afford a solution of the cause of the great diversity in febrile intenseness observed in different attacks of nettle-rash. In some, it is well known, there is little or no febrile excitement; in others it is alarmingly developed. Now, may we not conjecture that, when the febrile movement is slight or does not exist, the mildest of these three causes, sympathetic action, singly operates, and that, when the fever is more considerable, one or more of the intenser influences, or a combination of all, is called into exercise?

ART. VI.—*Report of Mortality in Buffalo for the month of Aug., 1857.*

By C. L. DARTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accident, ...	2	2	
Asphyxia Immersorum, ...	4	4	
Asthma, ...	1	1	
Apoplexia, ...	1		1
Cholera Morbus, ...	1	1	
Croup, ...	2		2
Cholera Infantum, ...	39	27	12
" Morbus, ...	6	3	3
Cancerum Oris, ...	2	1	1
Carcinoma, ...	2		2
Diarrhoea, ...	31	16	15
Dysenteria, ...	12	5	7
Dentitio, ...	7	5	2
Debilitas Senilis, ...	6	4	2
Erysipelas, ...	1	1	
Epilepsy, ...	1	1	
Eclampsia, ...	20	7	13
Febris Typhoid, ...	1		1
" Scarlatina, ...	4	1	3
" Remittent, ...	1	1	
Gastritis, ...	1	1	
Hæmorrhagia Renalis, ...	1	1	
Hæmoptisis, ...	1	1	
Hemiplegia, ...	1	1	
Hydrocephalus, ...	4	1	2
Hydrops, ...	5	1	4
Hyperæmia Cerebralis, ...	4	3	1

REGISTER OF MORTALITY—CONTINUED.

DISEASES.	No.	Males.	Females.
Hyperæmia Pulmonalis,.....	2	1	1
Ignotus,.....	28	17	11
Intemperance,.....	2	2	
Meningitis, Cerebro Spinal,.....	2	1	1
Marasmus,.....	15	10	5
Pneumonitis,.....	5	2	3
Pertussis,.....	3	2	1
Premature Birth,.....	2	2	
Peritonitis,.....	2	2	
Rubeola,.....	9	2	7
Serophula,.....	2	1	1
Syphilis,.....	1		
Still-born,.....	6	2	3
Tuberculosis Pulmonalis,.....	16	7	8
Variola,.....	1		1
Total,.....	257		

SEXES.

Males,.....	140
Females,.....	113
Sex not given,.....	4

Total,.....257

AGES.

Still-born,.....	6	Between 20 years and 30 years,.....	13
1 day,.....	1	" 30 " " 40 ".....	14
1 day and 30 days,.....	25	" 40 " " 50 ".....	6
Between 1 month and 6 months,.....	55	" 50 " " 60 ".....	10
" 6 months and 12 ".....	52	" 60 " " 70 ".....	9
" 1 year " 3 years,.....	40	" 70 " " 80 ".....	2
" 3 " " 5 ".....	8	" 80 " " 90 ".....	1
" 5 " " 10 ".....	7	" 90 " " 100 ".....	0
" 10 " " 20 ".....	7	" 100 ".....	0

Total number under 10 years,.....194

Total number over 10 years,.....62

Ages not given,.....1 Total,.....257

NATIVITIES.

American, (white,).....	143	Prussian,.....	0
" (colored,).....	3	Welsh,.....	0
German,.....	57	French,.....	0
Irish,.....	25	Scotch,.....	1
English,.....	5	Holland,.....	1
Canadian,.....	0	Country not given,.....	22

Total,.....257

EDITORIAL DEPARTMENT.

Nothing impresses us more forcibly with the sense of our own littleness, or reminds us more emphatically of the futility of all human skill and science, when the great destroyer demands his own, that when a great man, and he one of us, passes away. We are proud indeed when we say of such a man as MARSHALL HALL, that he was one of us, but now the great intellect which has advanced our science so much and which has contributed to save so many of his fellow-men, is gone. The name of Dr. Marshall Hall was more nearly connected with labors in science directly applied to the preservation of human life, than any living member of the profession; his "*ready method*" in asphyxia has, and will be the means of resuscitation in innumerable cases which would otherwise terminate fatally, especially when applied to the treatment of drowned persons; not only for the reason that it is the best mode of practice to be employed in such cases, but because it bids fair to be generally diffused among non-professional persons, and will supercede the measures which are so time-honored and pernicious. We can hope now to see the time when "rolling on a barrel" will be one of the things that has been.

The fame of Marshall Hall could easily rest, however, alone on his brilliant and immense advance into the physiology of the Nervous System. He first, and he alone pointed out the great divisions of the nervous system and discovered the excito-motor power which has elucidated so many obscure and incomprehensible phenomena, in all departments of medicine. With this discovery will his name always be most closely associated, while his numerous other labors will rank him among the most lavish contributors science has ever had.

Our profession is probably the most exclusive in the world, we are ostracized as it were, and all our hopes, troubles, pleasures and rewards are not to

be comprehended as appreciated but by one who labors for the same ends. The fame which we hope and desire most to acquire, is not the empty adulation of a crowd moved by the impulse of a moment, as notoriety attained by the force of peculiar circumstances, but the respect and veneration of deep thinkers and co-workers in the cause of science, our grand and glorious structure which has been built by the aid of such men as Hunter, Jenner, Abernethy, Hope, Good, Cooper, and Liston, of England; Majendie, Valliex, Robin, and Bernard, of France; Dunglison, Wood, Drake, Rush, Physic, and Gross, of our own country; with a host of others which we venerate and love as the names of great good men, who unselfishly have devoted their lives to the service of their fellow-creatures. High in the list can we put the name of MARSHALL HALL, and the sorrow at his loss will be the more deep, as it seems but yesterday that he was among us, and as one of his last acts was a voluntary and graceful acknowledgment of the claims of one of our countrymen to laurels which he had considered as his own.

We could present no more interesting matter to our readers than an account of his life and labors, in the August number of the London Lancet.

F.

"Death, that most unsparing of tyrants, has exacted from the greatest physiologist of the age the last debt of nature. Slowly, surely, and relentlessly, disease has been undermining the earthly tabernacle of a mind which, for vast powers, high purposes, and indomitable energy, has found no superior in its native land in the present half century. On Tuesday last the 11th inst., Dr. Marshall Hall died at Brighton, aged 67 years.

"It is impossible to record this melancholy event without feelings of the deepest sorrow. The loss is one which all must feel most keenly who have a reverence for high endeavors, for earnest devotion to science, and for all the sterling qualities which can adorn a man. Science has lost the worthiest of her sons, medicine has lost a great master, and philosophy a great thinker. The clear and vivid intellect of this celebrated man has steadily and successfully risen superior to the depressing influences of disease for the last fifteen years. Even during the present year, when confined to one room, his chamber has been a scene of intellectual activity. Physical debility, which robs most men of their power of thinking and reasoning, had not dimmed the brightness of his wonderful mind. Clear and penetrating, and impelled by a wide philanthropy, the last contribution of Dr. Marshall Hall to science has been a preëminently useful one to the cause of humanity. It is thus that great men should die. There is a grandeur in such a life-end, to which the mere external grace of a falling Cæsar is not for one moment comparable.

"Dr. Marshall Hall was born at Bashford, in Nottinghamshire, in the year 1790. His father was a manufacturer, and a man of no small capacity and information, and had the merit of being the first person to perceive the value of chlorine as a decolorizing agent, and applying it on a large scale. The gifts of intellect were bestowed with no sparing hand in this family. The father and two sons fully vindicated their claims to high intellectual endowments. But Dr. Marshall Hall has eclipsed his less brilliant relations. What in them was acumen and sagacity, was developed in him into genius. There was in him that rapid and far-searching intellectual vision which travels into regions far beyond the common ken of man, visible and appreciable only to the eagle glance of an almost prescient inquirer.

"The history of such a man cannot fail to present numerous points of interest. The investigation of the rise and progress of a mind which has ever been foremost in the ranks of science, must afford many good and useful lessons. No fitful glare can be recognized in this life—no charlatanic attempt to pluck a crown of laurels which was not deserved; but a stern, conscientious, and faithful continuance of patient scientific toil, and the solid reward of a vast reputation. The first step in Dr. Marshall Hall's education was taken at Nottingham Academy, then conducted by the Rev. J. Blanchard. From this school he went to Newark, where he acquired some elementary medical and chemical knowledge. But the first salient point in the life of Dr. Marshall Hall was his matriculation at Edinburgh University, in the year 1809. For a vigorous and apt mind, no better school could then have been chosen. In the present day it is hardly possible to realize the enthusiasm which inspired Edinburgh at that time. There were giants in those days. Enthusiasm, indeed, is almost too tame a word. There was a furor, an excitement produced by the united influence of a complete galaxy of talent. It was impossible but that such men as Cullen, Home, Rutherford, Gregory, Hamilton, Bell, and Barclay, should kindle in the ardent minds of a vast concourse of students a flame which should burn with answering brightness to their own. From the school of that time we know many great men have sprung. It is unnecessary to particularize names which are "familiar in our mouths as household words." In that genial atmosphere, then, did Marshall Hall first imbibe that enthusiastic love of science which has been his most marked characteristic. With youthful impetuosity he plunged into the study of chemistry. Not content with merely assimilating the accepted doctrines of the science, he boldly endeavored to push its boundaries farther. With wonderful power of generalization for so young a man, and with such small materials as then existed for the purpose, Dr

Marshall Hall pointed out that there was a grand distinction between all chemical bodies, which ruled their chemical affinities. He showed that this distinction was the presence or abacence of oxygen. That oxygen compounds combined with oxygen compounds, and compounds not containing oxygen with compounds similarly devoid of that element; and that the two classes of compounds did not combine together. He believed that this general law would elucidate other chemical doctrines, and might prove valuable in the prosecution of still more recondite principles. But a mind of such soaring aspirations was not likely to confine itself even to such a comparatively wide field as chemistry. The vast domain of medicine was before our student, rich in unexplored regions, abounding in all that could excite his eager spirit of inquiry, and reward his love of definite results. It was exactly at this period in the history of modern medicine that physicians were taking stock, as it were, of their old principles. Morbid anatomy, pursued in close connection with clinical medicine, was showing the defects of diagnosis. With the sagacious eye of one who was capable of seeing that the great necessity of the day was a science of diagnosis, Dr. Marshall Hall threw himself into the prosecution of this immensely important department of medicine at once. Here, again, we find fresh evidence of his eminently progressive spirit. No mere systematizing of what other men had gathered, but an original and comprehensive treatise resulted from the labors of his student life and early years in the profession.

"In 1812 Marshall Hall took his degrees of M. D., and shortly afterward was appointed to the much-coveted post of house-physician, under Drs. Hamilton and Spens, at the Royal Infirmary of Edinburgh. In the following year we find Dr. Hall lecturing on the Principles of Diagnosis to a class, amongst whom were Dr. Robert Lee and Professor Grant. It was from this course of lectures that the treatise on Diagnosis, which was first published in 1817, took its origin.

"In 1814, Dr. Marshall Hall left Edinburgh, after a residence there of five years. Great as was the individuality of this remarkable man, we cannot but point out that he was reared in a great school, taught by great men, and infected with an enthusiasm which pervaded, in some degree, all who came within its magical circle. Before entering upon his career as a private practitioner, Dr. Hall determined to visit some of the continental schools. We find him, therefore, shortly after his departure, successively at Paris, Berlin, and Göttingen. The journey was made partly on foot, and armed. At Göttingen Dr. Hall became acquainted with Blumenbach.

"In 1815, Dr. Marshall Hall settled at Nottingham as a physician, and he

speedily acquired no small reputation and practice. After a time, the appointment of physician to the General Hospital there was conferred upon him, and in that sphere he labored until his removal to London, about ten years after his first settlement at Nottingham. Of his work on Diagnosis it is almost unnecessary for us now to speak in terms of praise. Comprehensive, lucid, exact, and reliable, this work has, in the main, stood the test of forty years' trial. A better has not been produced. It was at this period of his career, too, that Dr. Hall made his researches into the effects of the loss of blood, the result of which was embodied in a paper read before the Royal Medical and Chirurgical Society in 1824. This paper, and another in 1832, detailing Dr. Hall's "Experiments on the Loss of Blood," were published in the "Transactions of the Royal Medical and Chirurgical Society." It is hardly possible to overrate the importance of these inquiries. They revolutionized the whole practice of medicine. A new light broke in upon the medical world. A distinction, not recognized before, was drawn between inflammation and irritation. It was pointed out that delirium and excitement were by no means necessarily declaratory of cerebral or meningeal inflammation, or even congestion. Loss of blood was shown to be at the root of much that had passed before for various grades of inflammation. Practical rules were deduced both for treatment and diagnosis. It was shown that active inflammation produced a tolerance of bleeding from a free opening in the upright posture; and the rare merit of supplying at once a rule of treatment and a rule of diagnosis was Dr. Marshall Hall's. Other works came forth from his pen about this time, for his mind was teeming with ideas, and his activity as an observer was unparalleled. It is hardly possible to enumerate all, but in 1827 came the "Commentaries upon various Diseases peculiar to Females"—a work which may still be consulted with advantage.

"It was in 1826, that Dr. Marshall Hall sought this great metropolis as the umbilicus of the world. So active and earnest a mind could not find enough to satisfy its eager cravings in a provincial town. It was here, in this mighty city, that he determined to measure himself again with numerous competitors, and to win, if possible, all the honor and all the rewards that fortune can give to those who woo her stoutly. The mind of this great man was essentially metropolitan and liberal. A fair field and no favor, and victory to the strongest, were the characteristics of his mind.

"The next onward step in Dr. Marshall Hall's career was a series of researches into the circulation of the blood in the minute vessels of the batrachia. A great step in physiology resulted from these. It was shown that

the capillary vessels, properly so-called, are distinct absolutely, both in structure and function, from the smallest arteries or veins; that the capillaries, or *methasmata*, are the vessels in which the nutritive changes in the economy are carried on.

"But the great source of Dr. Marshall Hall's honor, the basis upon which his fame must rest in all time to come, was yet undeveloped; his paramount claims to the admiration of his contemporaries and of posterity consists in his discoveries concerning the nervous system. Like all really important discoveries in natural science, those of Dr. Marshall Hall have had great practical effects. The soundest theory has been shown to be the best foundation for practice. That stupid heresy, that there is a vital distinction between the practical and theoretical man, was never more completely disproved than in the case of Marshall Hall. But we must endeavor to trace the progress of his researches. While engaged on the Essay on the Circulation of the Blood, it happened that a triton was decapitated. The headless body was divided into three portions: one consisted of the anterior extremities, another of the posterior, and a third of the tail. On irritating the last with a probe, it moved and coiled upward; and similar phenomena occurred with the other segments of the body. Here, then, was a great question. Whence came that motor power? To set at rest that question, to solve that problem, has been the great labor of Dr. Marshall Hall's life.

"The establishment of the reflex functions of this spinal cord; in short, the whole of the excito-motor physiology of the nervous system is the sole work of Dr. Marshall Hall. And not only this, but he has shown that there are in reality THREE great classes into which the various parts of the nervous system resolve themselves: the cerebral, or sentient-voluntary; the true spinal, or excito-motor; and the ganglionic. This was the real unravelling of that perplexed and tangled web which none had before been able to accomplish. The true idea of a nervous centre could never be said to have excited before the time of Marshall Hall. The ideas of centric and eccentric action, of reflection, &c., so necessary to the comprehension of nerve-physiology, were unknown before the labors of this great discoverer. But these physiological discoveries were not mere barren facts. How rich a practical fund of therapeutical measures naturally follows the physiology and pathology of the excito-motor system, every well-informed physician can testify. Two departments of medical practice have gained incalculably. The success of Dr. Marshall Hall in the treatment of nervous diseases was almost entirely the result of a rigid application of his own physiological discoveries to their pathology and therapeutics. Obstetricians have found their art elevated

more than any other branch of medicine. In the place of uncertain and empirical rules, there are now definite and scientific principles upon which to fall back, with the unhesitating assurance that they will stand in good stead. The most complicated of all physiological acts, viz., the act of parturition, has, by the aid of the excito-motor system, been unravelled and reduced to beautiful harmony, if not simplicity. In like manner many of the diseases of pregnancy are explained and illuminated by the same physiological knowledge. Innumerable symptoms of other diseases are rendered intelligible and rational, which before were obscure and empirical. But to follow out the influence of Dr. Marshall Hall's discoveries through their numerous and important ramifications would be almost to write a volume on the principles of medicine. It is impossible to say when we shall cease to find some new and important application of his discoveries to the great art of healing.

"We cannot pass by this period of Dr. Marshall Hall's life without remarking upon the disgraceful treatment he received from the Royal Society. The days of persecution had happily passed by, but the day of dull obstructiveness still remained. The Royal Society thought Dr. Hall's memoir "On the True Spinal Marrow and the Excito-Motor System of Nerves" unworthy of publication! So much for the acumen of this Society. A very different verdict has, however, been given since by the great body of scientific men; and the Society, which formerly received this great man's contribution coldly now mourns the loss of its brightest and most illustrious member.

"Since the promulgation of his researches upon the nervous system, Dr. Marshall Hall has been principally occupied with extending, applying, and developing them in every possible direction. The admirable success with which he indoctrinated the profession at large with his views must be attributed as well to his native lucidity as to their inherent truth.

"During the time of Palmer's trial, it occurred to Dr. Hall to institute a physiological test for the recognition of strychnia. As if to show the absolute correctness of his views, and how unlimited were the number and nature of the scrutinies they would bear, he found that a frog, immersed in water containing the $\frac{1}{1000}$ part of a grain of strychnia, would, in process of time, be thrown into tetanic convulsions. For the details of these experiments we must refer to *The Lancet* of last year. The physiological test was found to be far more delicate than the chemical. Here was an instance of sagacity and precision of thought which would have done credit to any man in the flower of his age.

"The last and crowning effort of Dr. Marshall Hall in the cause of science

and humanity has been his discovery of what is now universally known as the "Marshall Hall Method" of restoring asphyxiated persons. How completely and irrefragably he has proved the inutility and danger of the practices hitherto in vogue for the resuscitation of asphyxiated persons! Space prevents us from going into the theoretical details of Dr. Marshall Hall's method; but our columns have, for any time these last six months, contained overwhelming proofs of its *truth* and adaptation to practice. It is pleasing to find that this last labor of a great mind has been a labor of love, something added to the stock of human happiness, something taken away from the bitterness of life. It is singular enough that in the very place where Marshall Hall has drawn his last breath, two cases have lately occurred illustrating the superiority of the "Marshall Hall Method" over the empirical rules of the Royal Humane Society. In one case of drowning the warm bath was administered; in another, the "Marshall Hall Method" was resorted to: in the first case death was the result; in the second, restoration to life. It is also remarkable that in this number of our journal should be recorded three more examples, illustrative of the successful application of the "Marshall Hall Method" of treatment. It is curious, too, that one of them should have occurred at Nottingham.

"In the practice of his profession, Dr. Marshall Hall was very successful. He linked himself early and resolutely to a great subject, and rose into fame upon his development of it. He realized an ample fortune as the reward of a life of unremitting toil. We do not mean to imply that competency was hardly earned under such conditions. Such a man would have been less than happy in a different sphere. Labor was to his restless and indomitable spirit a necessity. Even now, when we are recording the death of this illustrious and lamented physician, there is a volume in the press,—a recent effort of his prolific mind; and until within two months before his dissolution, the mental energies of this extraordinary man were engaged in preparing for publication, in *The Lancet*, a series of papers, entitled, "The Complete Physiology of the Nervous System."

"It is somewhat remarkable that Dr. Marshall Hall never held the office of physician in an hospital in London. He was only physician to a dispensary for a short time. He lectured at the Aldersgate-street and Webb-street School of Medicine, and also at St. Thomas's Hospital Medical School. He was a candidate for the Professorship of Medicine at University College upon one occasion; but owing, it is believed, to some improper influences, matters assumed such an aspect as to induce Dr. Hall to retire from the field.

"We have thus far considered Dr. Hall as a man of science. In other

relations of life he was equally deserving of our highest respect. As a politician, he was liberal in the highest degree. He was a strictly moral man, and was deeply imbued with a sense of the obligation of a *practical* cultivation of religion. That which he thought right to do, he *did*, with unwavering honesty and courage. All subterfuge, trickery, quackery, and guile, were utterly foreign to his nature. So simple and childlike was he in disposition, as hardly to be able to imagine in others the guile which had no home in his own breast. He was a kind husband, a most indulgent father, and a faithful friend. He married, in 1829, Charlotte, second daughter of Valentine Green, Esq., of Normanton-le-Heath, Leicestershire. Mrs. Marshall Hall's maternal grandfather was M. P. for Shaftesbury, and son of Dr. Cromwell Mortimer, physician to the Prince of Wales, father of George III. Throughout the protracted illness of Dr. Marshall Hall, the assiduous, devoted, and unremitting attentions of an affectionate wife were probably never surpassed. This testimony is due from personal observation of the fact. The deceased has left one son, who has relinquished the profession for the rural life of a country gentleman.

"We must now close our notice of one over whose name we would fain linger. Melancholy as it is to say he *was* amongst us, our sorrow is stayed by the reflection that he did not live in vain. All that a grateful profession has to give to his memory will be given. We shall still think of him with affectionate respect as a Father in medicine, but as a child in the purity and simplicity of his mind. Though no title has adorned the name of the great Marshall Hall, we who are left behind will esteem him as one who would have graced rather than have been graced by honors however exalted. The *title*, which he preferred beyond all others was that of the English physiologist.

"The mortal remains of this distinguished man were, on Wednesday, removed from Brighton to Nottingham, where, we believe, a post-mortem examination has been made by his brother-in-law, Mr. Higginbottom, his nephew, Mr. Higginbottom, Jr., and Dr. Ransom, physician to the Nottingham General Hospital. It is believed that the death of Dr. Marshall Hall was caused by exhaustion produced by a stricture of the œsophagus of many years' standing, accompanied latterly, it was considered by many eminent surgeons, with malignant ulceration of the part. Dr. Alfred Hall, of the Old Steyne, Brighton, was one of the chief medical attendants of the deceased in his last illness. Sir Benjamin Brodie had long since pronounced the malady from which Dr. Marshall Hall was suffering to afford no hope of the application of any permanent remedy."

Dr. Ch. Robin, of Paris.—We find in a letter of the Parisian correspondent of the New York Times, a glowing but just tribute to Robin. Of the medical luminaries of Paris, he is a "bright particular star." To listen to his instructions; to see and know him and kindle one's own zeal by witnessing his enthusiasm and self-sacrificing industry, are objects of themselves, sufficient to repay for crossing the Atlantic. The labors of Robin are not not known in this country so much as their importance claims. His great work incorrectly styled anatomical and physiological chemistry, prepared in conjunction with M. Verdeil, is yet to be translated. He has been for some years past engaged on a still larger work—general anatomy, healthy and morbid—which we trust will soon be completed. It is safe to predict that the publication of this work will form an important epoch in the history of these branches of medical science. By his admirers, Robin is often styled the Bichat of the present day. The following is the passage in the letter referred to:

"There is a young physician at Paris, whose example is well worthy a notice here. His is a name which is heard hundreds of times daily from one end of Europe to the other in the mouths of the most distinguished men of science of all countries. And yet he is a poor man, who dines at a cheap restaurant in the Latin quarter with students, and who lives upon a patrimony that would scarcely pay the servant hire of many of his colleagues in science. This is Robin, the microscopist. He is a deathly pale, thin, serious-looking young man, of about thirty-four years of age. His whole life is devoted, by means of the microscope, to the study, the demonstration and classification of morbid tissues. There is scarcely a cancer excised at Paris, nor a doubtful *post-mortem* examination made, that Robin and his microscope are not consulted, and his word is authority. His whole life is spent in the exploration of the dead body in order to benefit the living. And all this he does modestly, in poverty, and to the sacrifice of his health, for the promotion of pure science and correct opinions. He has, it is true, the gratification of being adored by his colleagues, old and young, of never having his name pronounced but with veneration; but it is such men as these that are neglected by the public."

Dr. Fell, the American Cancer doctor.—The name of Dr. Fell has been of late bruited in our newspapers in connection with the case of the distinguished American sculptor, Crawford, who has been under his treatment, in

London, for a malignant disease situated behind the orbit. • This Dr. Fell, it appears, is a graduate in medicine of the New York University, who settled in London and professed to be able to cure carcinoma by means of a local application used by the North American Indians on the shores of Lake Superior! The managers of Middlesex Hospital, with more liberality than wisdom, placed at his disposal a ward for cancerous patients, he promising to make known the remedy used at the end of six months. This period having expired, the cancer doctor has reluctantly, as it seems, been compelled to publish a recipe of the application. It turns out to be chloride of zinc in combination with the root of the *sanguinaria canadensis*. Both have been for a long time, as our readers need not be informed, used as escharotica.

We have in this instance another illustration of the folly of encouraging a trial of remedies which are to be kept secret till their efficacy is established. The cancer doctor succeeded in obtaining the sanction of a well known hospital, and this was all he desired. In the mean time, he has no doubt filled his pockets with fees from credulous paying patients. The managers of Middlesex Hospital are probably now ready to echo the sentiment contained in the well known lines, "I do not like thee Dr. Fell," etc. *

Fat Men.—The Nashville Med. and Surg. Journal contains an account of a remarkable example of the "adipose diathesis." Tennessee has furnished many men intellectually and morally great. What may be its relative claims in this respect among her sister States, we are not prepared to say, but certain it is that in men of fat she carries off the palm. We quote the account as follows:

"Mr. Darden was born in North Carolina in 1793, and died at his residence in Henderson county, Tennessee, January 23, 1857. He was seven feet six inches high. In 1845 he weighed eight hundred and seventy-one pounds, and at his death a fraction over *one thousand pounds*, and was unquestionably the largest man in the world, and since "those days" in which there were giants, the largest man the world has produced. Up to 1853, "he was quite active and lively, and labored," after which, his fat increasing, he was compelled to stay at home or be hauled about in a two-horse wagon. It required thirteen and a-half yards of flax cloth, a yard wide, to make him a coat. It required sixteen yards of cambric for his shroud, and twenty-four yards of black velvet to cover his coffin."

University of Buffalo.—The announcement of this school in the present number, reminds us of our delinquency in not referring renewedly to its claims upon our profession and the attraction it holds out to students. Its faculty, including such names as Hamilton, Flint, White, Hunt, Lee, and Rochester, whom we know, and their colleagues, all of whom are able and practical teachers, places this medical college on a par with any one in our state or country. The college and hospital buildings offer clinical opportunities for students, unsurpassed, whole the location is at a point accessible from a wide extent of our own country and adjacent to the Canadas. We shall be surprised if this school does not hereafter exceed any former prosperity.—*Am. Med. Gaz.*

Dr. Reese, editor of the American Medical Gazette, has paid, in the above, a glowing compliment, indeed, to one of our city institutions. But is the compliment deserved? The University is embarrassed with its own dreadful unpopularity with the medical public. For years past it has hardly made a show of students. We believe, too, that the disfavor which it suffers is mainly owing to some or most of its managers. We can assure the editor of the Gazette, if this school does hereafter exceed any former prosperity, it will be only under an entirely new administration, and not from any recuperative power which it now possesses.—*Buffalo "Advocate."*

We regret to see in a paper, claiming to possess more than the usual modicum of Christian spirit so malignant an attack on an institution which is, and should be, esteemed and prized by all who have any means of judging of its character and usefulness. Local pride alone should have prevented such a tirade; an ordinary sense of justice to men who have labored long and with small reward, in the support of an institution of learning, should have forbidden the publication of a paragraph highly injurious to their personal reputations.

The Advocate says that the "University is embarrassed with its own dreadful unpopularity with the medical public." But the Advocate cannot name ten medical men who will speak in anything but terms of praise of this school; and although the University has been secondarily involved in exciting controversy with some of the medical journals of the country, not one of them has ever dared to utter one word against the character of its faculty, as men or teachers.

The Advocate says that "for years past it has made scarcely a show of students." Let us see how this is. Last winter it had between fifty and sixty *bona fide* students. The neighboring school at Cleveland, which once had 250, had then only thirty students. At Geneva, where the class some years since, and under the conduct of some of the same men now engaged in the Buffalo school, numbered 200, they had last winter but seven. At Columbus, Ohio, with a building costing \$70,000, and every other attraction,

the class numbered about forty. In Cincinnati no one of the three paid expenses.

The reason for this state of things is two-fold. The profession of medicine *pays* so poorly that fewer young men than formerly choose it as a means of livelihood; and, second, the schools of New York and Philadelphia have made every effort to increase the well-known tendency to centralization in those cities; so that now comparatively few young men graduate in provincial schools. Under these two discouraging causes, the Buffalo Medical College has maintained itself better than any other of the so-called country schools, because it has a better museum, better hospital advantages, and better teachers than they.

As to the prospect of any "new administration" in the Buffalo school, we can assure our friend of the Advocate, that it may abandon all hope. Its faculty and council are a unit in all their purposes. Its teachers are, with perhaps one exception,—personal modesty forbids the mention of a name,—men of reputation. For a series of years the medical works they have published have been standards, and their contributions to the Transactions of the American Medical Association have been the leading features of its meetings. The names of at least three of them are well known and frequently quoted in the highest medical circles of France and England; the books of one of them have been reviewed in tones of eulogy by the highest authority in both those countries; and the faculty feel that so long as they possess the confidence and esteem of the profession of the country at large, as well as that of Europe, they can stand up under the criticism of the Advocate.—*Buffalo Commercial Advertiser.*

Fees for consultations by letter.—MESSRS. EDITORS: Will you give insertion to the following extract from the Boston Medical & Surgical Journal, for the benefit of the members of the profession in this region who belong to the band of "afflicted brothers" to which Xenophon alludes? All sensible readers must concur in the reasonableness of the views expressed by the Boston editors:

Medical Ethics.—*A letter of advice equivalent to a consultation, and should be in like manner remunerated.*—MESSRS. EDITORS: Suppose you were to receive a letter, filling full three pages of fair foolscap, and reciting all the facts (to the writer) of a case, reporting the treatment, and finally

asking an opinion and an advice—but containing neither fee nor postage stamp. What would you do? Would you read it? Suppose you do read it, but can really make no opinion, either of diagnosis, prognosis or treatment. *Would you answer it?*

Again: Suppose you receive another letter from another source, *without any enclosure*. Suppose you *can* form an opinion about the disease, and might recommend a treatment. Do you feel bound to answer it?

One largely afflicted brother in this way, impatiently waits an answer.

XENOPHON.

With regard to Xenophon's first question, we think the practitioner is not bound to take notice of a letter containing neither fee, postage stamp, nor an intelligible account of the case. He may, if he pleases, put the letter in the fire. We should read it, but should not, under ordinary circumstances, answer it.

As to the second query, we should withhold an opinion until the fee were paid, if the request came from an unknown party. We should not feel bound to answer it.

A person writing a description of a case, and requesting in answer an opinion or advice, is bound to enclose in his letter the usual fee, or to ask the amount owing, and to transmit it by return mail. (The fee for a letter of advice, established by the Boston Medical Association, is from *five to ten dollars*.) It is always understood that a business letter requiring an answer (except between regular correspondents,) should contain a postage stamp.

We state our opinion in general; of course there are exceptions. A former pupil or a personal friend has a right to ask an opinion without being expected to pay for it; but this privilege is not to be abused, especially in a case really requiring a consultation, the patient being able to pay. When the patient is too poor to pay the fee, if this is distinctly stated, the party giving the opinion will ask no compensation. In short, a letter of advice is the same thing as a consultation, and the writer is not only entitled to his fee, but ought to insist on receiving it, where the advice is regularly sought, and the patient able to pay.—*Boston Med. & Surg. Jour.*

CLEVELAND, Sept. 8th, 1857.

Editor Buffalo Medical Journal.

SIR: I send you a *special notice*, taken from the circular of the Cleveland Med. College, calling the attention of the medical profession, to the fact that Prof. Weber is the medical superintendent of the Cleveland Infirmary, (which means the Cleveland Poorhouse) claiming valuable clinical advantages afforded by that institution, to such students as attend the Cleveland College. Now the said Infirmary or Poorhouse, is over three (3) miles from the college; I would like to know how the students are to be particularly benefitted; are the sick to be brought a distance of over three miles, in the

winter months, or are the students to visit the poorhouse, for clinical instruction? I presume the latter, and I would suggest to the faculty, that they charter *one* of Mr. Stevens' omnibuses, for the purpose of carrying the medical class and themselves to said institution on clinic days.

By looking over this special notice, you will see that the faculty also announce that through the politeness of Dr. Tod, the class will be permitted to visit the U. S. Marine Hospital for the purpose of clinical instruction. If Dr. Tod has given such a pledge, he has overstepped his privileges, and I will venture the assertion that the Secretary of the Treasury will not permit it.

I wish to inform the medical profession how Prof. Weber obtained the appointment of physician to the Cleveland Poorhouse, and I wish it be understood that the faculty of the Cleveland College fully endorse his conduct in this matter.

The city paid last year to the physician eight hundred dollars as a salary, and all agree that the amount was sufficiently low; this year there was a number of applicants for the post, as is usual, among whom there were several graduates of the Cleveland Medical College; none were willing to do the business for a less sum than eight hundred dollars, except our recently imported German Professor, who meant to make a sure thing of it, and put in his bid at the *modest* sum of two hundred dollars, cutting down the fees six hundred dollars at one dash. Surely their own graduates and the profession generally, are under vast obligations to this school. It remains to be seen whether the medical profession will sustain a school whose faculty condescend to such unmitigated meanness, and unprofessional conduct. If this kind of conduct meets with the approval of our medical colleges, the sooner they are wound up the better it will be for the profession. I have no hesitation in saying that all such miserable catch-penny schools tend only to degrade the profession instead of elevating it. If their conduct does not forfeit all claims to respectability I do not know what can.

A PHYSICIAN OF CLEVELAND.

Special Notice.—Professor Weber, being now Medical Superintendent of the Cleveland City Infirmary, the valuable clinical advantages afforded by that institution, which always contains a large number of patients, will be fully open to the medical class.

Also, by the politeness of Dr. Tod, the present medical officer of the U. S. Hospital, located in this city, we are further permitted to assure students who may find it convenient to attend the lectures in Cleveland Medical College, that arrangements for extending their privileges in clinical instruction, will also be made at the hospital; subject, of course, to such regulation as the U. S. Government may prescribe.

In the September number of the Southern Medical and Surgical Journal, we find an account of a novel method of treating intestinal obstruction, with the report of a case by Dr. Tate, of West Point, Ga. Our space will not permit us to give the entire article, but we can merely describe his new method with the result, in the reported case, which was entire relief after all other measures had failed.

Dr. Tate was called to see a negro man who had been suffering for some time from constipation. All sorts of means were employed to procure an evacuation, but without effect; the next day, however, he discovered a strangulated inguinal hernia, which was successfully operated on on the following morning. To the doctor's surprise, the bowels did not move after the operation, in spite of the administration of croton oil, castor oil, and the injection of a gallon of water. The doctor then decided on the following course of treatment, which we insert:

March 18th, 2 o'clock, A. M. Being well satisfied that an intussusception or rather mechanical obstruction, existed above the strangulated point, and having, as I conceived, used every remedy worthy of trial in such a case, I determined to proceed upon my own responsibility, let consequences be as they might; therefore, I began again the use of warm water enemas, throwing them into the bowels slowly and cautiously; and after having introduced by a pump syringe, one gallon of water, I next dissolved 40 grs. of tartaric acid in $\mathfrak{z}$ iv of water, introduced that into the intestines; had a large compress prepared and placed in the hands of a strong negro fellow, with instructions to apply it to the anus, and hold it there, so as effectually to prevent the escape of either gas or water after I should introduce 40 grs. of *bi-carb. of soda*, dissolved also in $\mathfrak{z}$ iv of water. The soda was introduced, the compress used admirably, and poor Will rolling on the floor, crying at the top of his voice, "I shall burst—take that thing away, my bowels are tearing in two." The compress was removed; gas, water and fecal matter escape freely, to the astonishment of all bystanders. In half an hour the same amount of warm water, tartaric acid and soda were used again, and with the same happy effect.

The only medicine given after this, was calcined charcoal, which passed through his bowels with no difficulty. All being well satisfied that the obstruction was fully overcome, and Will declaring himself cured, he was discharged on the 20th.

The introduction of large quantities of water through a long tube is not novel, and occasionally we introduce air in the same way; but the proposition of Dr. Tate to use gas generated in the intestines, is new and worthy of trial. It reminds us of the story of an Eastern Cadi, who captured a stranger and some seidlitz powders, which he was assured possessed remarkable virtue. Accordingly he swallowed the contents of all the white papers, follow-

ing them immediately by all the blue; what the result was is not recorded, but our readers can imagine what a *réduction* must have followed. F.

New Method of treating Abscess.—We find under this heading the following in the New Orleans Medical News and Hospital Gazette:

"In the July number of the Southern Medical and Surgical Journal, we notice interesting extracts from letters from Dr. T. A. Means, of Georgia, now in Paris. He says: 'M. Chassaignac has now in his hospital some forty patients under treatment for *abscess*, by a new system which he terms *drainage*. It is simple, rational, and effective. He employs a gum elastic tube about one-eighth of an inch in diameter, perforated along its sides with small holes, at intervals of two or three inches. When called to operate, he thrusts a trocar and canula entirely through the abscess at its base—withdraws the trocar, inserts the tube in the canula, passes it through, and then removes the canula itself—leaving only the flexible tube to perform its work of drainage. All can be done in ten minutes, or less time. Some two or three times per day, the tube should be moved, one or two inches, so as to allow a free exit of pus through the openings.'"

"The Retired Physician."—The readers of the newspapers for the last few months, must have noticed an announcement of the existence of a "retired physician whose sands of life have nearly run out," hailing from Jersey city. This aged advertiser of a quack nostrum is said to be a young man about twenty-five years old, in good health, and engaged most of the time in writing for the New York Sunday papers. Such is the inexhaustable credulity of a portion of mankind on the subject of remedies, that we presume this "new dodge" has proved remunerative to the inventor.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

NOVEMBER, 1857.

NO. 6.

ORIGINAL COMMUNICATIONS.

**ART. I.—*Fractures of the Zygoma, or Zygomatic Arch.* By FRANK
HASTINGS HAMILTON, M. D.**

The zygoma, strictly speaking, is formed in a great measure by the body of the malar bone, and it is broken whenever the malar bone is completely separated through any portion of its body; but I propose to confine my remarks to that portion only which is composed of the two processes, called respectively the zygomatic processes of the malar, and temporal bones.

Duverney related a case in which a young infant having in his mouth the end of a lace spindle, fell forward and thrust the spindle through the mouth from within outward, breaking the zygoma in the same direction, and leaving the fragments salient outward.*

I know of no other example in which the fragments have been thrust outward. A reference to my experiments upon the naked skull will, however,

* Bulletin de la Société Anatomique, pp. 136, 1810.

show that the zygoma may be broken in the same direction, by any force which shall fracture the superior maxilla, and depress the anterior margin of the malar bone. In my experiments this has happened three times, and always at the same point, viz., a little beyond the middle of the zygoma, near where the suture which joins the two processes terminates below. The fractures were always transverse, and not in the line of the suture. They were therefore fractures of that portion of the zygoma which belongs to the temporal bone.

I suspect, also, that to this class of cases belongs the example related by Dupuytren, in which the patient having died on the fifth day, from the effects of the cerebral concussion, the autopsy disclosed "a fracture through the zygomatic arch; and that part of the superior maxillary bone which constitutes the antrum was driven in."*

In another case mentioned by Dupuytren, produced by a direct blow, the fracture was compound and comminuted, and although the fragments were raised easily by an elevator, suppuration ensued beneath, and the matter was discharged within the mouth.†

Tavignot reports a case of fracture of this arch which was not discovered until after death, the fragments not being at all displaced.‡

Dr. John Boardman, one of the surgeons to the Buffalo Hospital of the Sisters of Charity, informs me that he has lately met with a fracture of the zygoma in a man about 30 years of age, occasioned by a blow from a cricket ball. Dr. Boardman saw him on the fourth day, and ascertained that immediately on the receipt of the injury he felt slightly stunned, and that he soon recovered from this, but was unable to open his mouth except by pulling it open with his hand; neither could he close it except in the same manner. This immobility of the jaw continued several days with only very slight improvement; at the end of five weeks, however, when last seen, the mobility was nearly, but not quite restored. The depression, a little in front of the centre of the zygoma, was discovered by the patient himself immediately after the receipt of the injury, and he says he tried at once to ascertain whether he could not push it back by moving the jaw. He was unable to make any impression upon it by this manœuvre. The depression still remains, but it is not so distinct as it was when first seen.

* *Injuries and Diseases of Bones.* By Baron Dupuytren. Syd. edition. London. 1847. p. 236.

† *Op. cit.*, p. 335.

‡ *Bulletins de la Soc. Anat.* 1810. p. 138

Symptoms. An irregular projection or depression of the fragments are the only signs which can be relied upon to indicate the existence of this accident; and this must often be concealed by the swelling, which follows so rapidly wherever the integuments are severely bruised over a superficial bone. This displacement can scarcely occur in but two directions, either outward or inward; since the attachments of the temporal aponeurosis above, and of the masseter muscle below, must effectively prevent its descent or ascent.

Neither motion nor crepitus will often be present. In some few cases the difficulty in opening or shutting the mouth, occasioned by the projection of the fragments toward or into the tendon of the temporal muscle, may assist in the diagnosis.

Prognosis. If the fracture has been produced indirectly by a depression of the malar bone, the prognosis must depend upon the amount of injury done to the other bones of the face; in itself, the fracture of the zygoma cannot be a matter of any moment. The same remark might apply also to any fracture of the zygoma in which the angles were salient outward. If, on the contrary, the angle is salient inward, the fracture having been produced by a blow inflicted directly upon the zygomatic arch, from without, or by a blow upon the outer portion of the malar bone, it may, perhaps, occasion some embarrassment to the action of the temporal muscle.

If the force which produces the fracture has acted more upon the temporal portion of the arch, near where the process arises from the temporal bone, it may be accompanied with a fracture of the skull, and with serious cerebral lesions, as in one of the cases already alluded to as having been noticed by Dupuytren.

The abscess which followed in the case of the compound, comminuted fracture, quoted from the same author, indicates the danger of this complication; but it must be noticed that its evacuation resulted in a rapid cure, and that no deformity or difficulty in moving the jaw remained.

Treatment. A fracture, accompanied with an outward displacement, and occasioned by a depression of the malar bone, will be adjusted by a restoration of the malar bone in the manner already described, when speaking of fractures of the superior maxillary, &c. If the fragments are displaced outward, in consequence of a direct blow from within, then they may be replaced by pressing upon the projecting angle. In this way Duverney easily reduced the bones, in the case which I have cited.

When the fragments, in consequence of a direct blow from without, have

been driven inward, and, as a consequence, serious embarrassment to the motions of the temporal muscle ensues, an attempt ought to be made at once to replace them; if, however, no impediment to the action of the muscle exists, it is scarcely necessary to say that no surgical interference will be required. It is quite probable, indeed, that a slight amount of embarrassment may be the result of the direct injury to the muscle inflicted by the blow, without reference to the displacement of the bone, and that a few days will suffice to remedy this evil entirely; and, moreover, experience teaches that in the case of a fracture in other bones, where the fragments actually penetrate the muscles and remain thus displaced, the points are gradually absorbed, and rounded so that after a time they constitute no impediment to the action of the muscles. It is proper to infer that the same thing will occur here. The surgeon may be reminded, also, that it is not the muscle but only its tendon which is liable to be penetrated, and that even this is usually protected somewhat by a plate of soft adipose tissue.

If to these considerations we add the difficulties which we shall be likely to encounter in the reduction, we shall expect to find but few cases in which a resort to surgical interference will be necessary.

Duverney says that he restored a fracture of this arch, accompanied with depression, by pressing against the zygoma from within the mouth; but an examination of the interior of the buccal cavity will convince us that this is impossible when the fracture is at any point near the middle of the zygoma, and that it can be only when the fracture is at or near the junction of the zygoma with the body of the malar bone that any effective pressure can be made from this direction. In such a case, we may, perhaps, lift the portion of the zygoma remaining attached to the malar bone, by the same means which have already been suggested for lifting the bone itself.

If the bone is driven toward the tendon of the temporal muscle at or near its centre, as happens almost always, then if its restoration becomes necessary, it can be accomplished only by approaching the bone from without.

Dupuytren found an external wound through which, by the aid of a levator, he easily restored the fragments to place.

M. Ferrier, however, of the Hospital of Arles, in a case brought before him, made an incision through the integuments down to the bone, and then attempted to slide underneath the small extremity of a spatula; but the sponeurosis would not yield, and he was obliged to cut it also. He was now able to lift the fragments easily. The wound healed rapidly and the patient was dismissed without any deformity.*

* Bulletin des Sciences Méd. Tom. 10, p. 160.

ART. II.—*Reduction of the Hip-Bone by Manipulation; or, Fragments of the Literature of this Method.* Compiled by FRANK HASTINGS HAMILTON, M. D.

"If the thigh-bone be luxated inward, and the patient young and of a tender constitution, it may be reduced by the hand of the surgeon, viz: he must lay one hand on the thigh, and the other on the patient's leg; and having somewhat extended it toward the sound leg, he must suddenly force the knee up toward the belly, and press back the head of the femur into its acetabulum, and it will knap in. For there is no need of so great extension in this kind of luxation; for the most considerable muscles being upon the stretch, the bowing of the knee as aforesaid reduceth it. Yet in rough bodies it may require stronger extension: and in that case the patient must be laid upon a table flat on his back; and a pin of a good thickness ought to be fixed in the middle of the table, to stand up between his legs close to that inguen, that the extension may be made thereby. During which the extension must be made by two men, the one pulling him by that arm-pit, the other by the leg; which latter extension must be made obliquely toward the sound leg."—*Eight Chirurgical Treatises. By Richard Wiseman, Serjeant-Chirurgion to King Charles II. London: 1676. Book vii., Chap. 8.*

"If the bone be dislocated inward, and the patient young and tender, it may be reduced by hand; in order to which the operator must lay one hand upon the thigh, and the other upon the leg, and then suddenly forcing the knee up to the belly, and pressing the head of the femur back, the bone will slip into the acetabulum. In bodies where stronger extension is required, the patient is to be laid upon his back on a table, a thick pin being fixed in the middle, which rising up betwixt his legs is to be placed close to that inguen, where the protuberant bone is lodged; then one is to pull, taking hold of the armpit, and another is to extend by the leg obliquely toward the sound leg."—*A System of Rational and Practical Surgery. By Richard Boulton, late of Brazen-Nose College, in Oxford. London: 1713, p. 346.*

"The manner of replacing the Dislocation, either inward or outward, is by laying the patient supine, or with his face upward upon a table, in which for the better extension or stay of the body, a wooden pin, about a foot and a-half long, is fixed, which is to bear close up the twist, or against the groin on the lame side; then fastening a strong towel or napkin about the knee, with another below, a third being beforehand put up to the groin, round

about the hip, against which the pin aforesaid is to rest; after which, taking fast hold of the ends of the said towels, the extension, as also the counter-extension, is begun, by several strong arms, whilst one likewise, at each armpit, may farther the same, not only steadying of the body, but augmenting the counter stretch when it is wanting: During which, so soon as the surgeon perceives the bone moving out, let him take his opportunity, giving order to the extenders below, suddenly to lift up the patient's thigh toward his belly, pressing with his hands, either to the right or left, as the situation of the same requires, and therewith force back its head toward the acetabulum, whereunto it will, flipping over the tip of the cartilage, snap sometimes with a loud noise.

"But supposing the processus, or prominency locked under the glutei, or muscles of the buttock, the former posture is to be reversed, and the body laid prone, in like manner or on the face, the pin rising up, on the side of the twist, which, after suitable extension as before, the surgeon, lifting up the femur, or thigh-bone, or rather giving orders to the extenders so to do, with his hands presseth down the head into its seat aforesaid.

"The like where it is forced to the outside, the extension, elevation and pressure, being made to the contrary, that the bone may be more certainly and securely conducted to the cavity it was flown from; in which nothing but a right and due knowledge of the skeleton, in its several articulations, assisted also at the same time by a diligent comparison of the limbs, the the sound with the lame, can, as we have already more than once observed, render you complete or dexterous in this part of your profession.

"Where the extension by the hand proves insufficient, the tackle and pulleys are wanted, to supply the deficiency thereof; notwithstanding which, though some very eminent practitioners have been concerned therein, I have more often known the dislocations of this kind still left unfinished, than those of the humerus, or shoulder-bone.

"An officer, at the Red-Lion in Red-Cross Street, a young sprightly fellow, being thrown from his horse, in the fall displaced this bone; finding himself unable to stand upon his leg, he was carried up to his chamber, and put into a bed; after which they sent for me, who, upon examination, plainly felt the head of the bone in the inguen, and the cup or cavity of the coxendix forsaken by the same.

"In order to its reduction, I called for the assistance of three strong fellows, at that time in the house; and, happening in his neighborhood, I sent also to Mr. Richard Bateman, then living just by, but he being from home, his servant came to me. I then asked for several strong towels, one of which

I drew up between his legs, close to the groin, but clear of the testis, each end of which was committed into the hands of two of the assistants before-mentioned, in order to a counter-extension; to two others, placed one above, the other below the joint of the knee, two more; and, as a farther help to the counter stretch, others were called in, who under each arm were to draw up the trunk, and keep the body from wriggling out of the way.

"Being thus set at their several posts, and all things provided I had occasion for, as the patient lay rather on the sound side, kneeling on the bed over him, I clapped my arms high up under the fleshy part of his thigh, ready for the work, and giving orders for the extension to be begun, both above and below, as I found the bone to move, with my arms, as aforesaid, I lifted it again to its acetabulum, where it flapped in very loudly, and perceptibly to us all.

"After this I applied a large defensive plaister round the hip, with bolstering in the hollow of the twist, and rolled him securely up: The rest being nature's work, only directing him to lie still and quiet, and confining him to his bed for a month's time, which was not but with great difficulty complied with; for finding himself so perfectly easy, eating, drinking and sleeping as well as before, having youth and an excellent well constituted temperament, he had no notion of the necessity of such confinement; and, unknown to me, had got up at the fortnight's end, of an evening, drinking and playing at cards with his companions. At about five week's end, coming into the yard, I saw him in the riding-place, laying his hands on a horse's back, leap upon the same; which he told me (and reasonably) was much easier to him, than mounting by the stirrups; in which, the heel making an angle with the hip, the head of the femur is brought out nearer to the brims of the cartilage, and in greater danger of slipping over the same, by stretching of the teres; Nor did he, as I could hear, ever make complaint of a weakness in the joint after.

"This case, with two others, in one of which, the head of the femur was beat backward, I do not blush to own, have been the only successful enterprizes of this nature, in which, I have myself, as principal, been concerned, which were all too performed singly by the strength of the arm, or without any other instrument."—*The Art of Surgery; by Daniel Turner, M. D. London: 1742. vol. ii, pp. 339-42.*

Heister recommends the use of hooks, or pulleys as a general rule; the method of using which he particularly describes; "or," he adds, "the reduction may be made by napkins, fastened around the extremity of the thigh

like blings, much as in a luxation of the humerus; which will be more likely to succeed, if the knee be at the same time pressed inward by the hands."—*A General System of Surgery; by Dr. Laurence Heister, Prof'r of Physic and Surgery in the University of Helmstadt, &c., &c. London: 1768. Book III, Chap. x, p. 186.*

"Two Cases of Dislocation of the Femur, with an account of the Method of Reduction. By Mr. THOMAS ANDERSON, Surgeon in Leith.

L "In Sept., 1772, Mr. Bruce, surgeon at Musselburgh, sent to me, desiring I would meet him at Lord Abercorn's coal-work, one of the colliers having dislocated his left thigh bone. I there found Messrs. Bruce and Stewart, surgeons in Musselburgh, and Messrs. Simpson and Clarkson, surgeons in Dalkeith, who were just begun to attempt the reduction by pullies. With these several trials were made; but the lacque round the knee slipping, it was taken off. By these means I had an opportunity of examining it. I found the left knee protruding three or four inches further than the right, and the one could not be brought within eight or ten inches of the other, the foot being turned out. When it was moved upward and downward, if done gently, he found little pain; but I observed, when it was nearly, or altogether extended, the head of the bone became fixed. And he complained more when it was in that situation, if any rotatory motion was attempted with the femur, which gave him no uneasiness when the thigh was brought up toward the abdomen. From the above appearance, it was certain the head of the bone was displaced from the acetabulum, and lodged downward and inward, in the large foramen of the ischium and pubis. I was convinced that attempting the reduction, in the common method, with the thigh extended, was improper, as the muscles were all put on the stretch, the action of which is perhaps sufficient to overbalance any extension we can apply. But by bringing the thigh, to near a right angle with the trunk, by which the muscles would be greatly relaxed, I imagined that the reduction might more readily take place, and with much less extension.

"When I made this examination, he was lying on a table on his back. I raised the thigh to about a right angle with the trunk, and, with my right hand at the ham, laid hold of the thigh, and made what extension I could. From this trial I found I could dislodge the head of the bone. At the same time that I did this, with my left hand at the head and inside of the thigh, I pressed it towards the acetabulum, while my right gave the femur a little circular turn, so as to bring the rotula inward to its natural situation; and,

on the second attempt, it went in with a snap observable to the gentlemen standing around, but more so to the poor man, who instantly cried out he was well and free from pain. His knees could then be brought together; the legs were of the same length, and the foot in its natural situation. The knees were kept together for some time, with a roller, to confine the motion of the thigh; and in three weeks, he was at his work, without the least stiffness in the joint.

II. "A boy, eight years old, of a strong healthy constitution, while he happened to be carried on his sister's back, lost the hold he had of her neck, and fell to the left side. She, however, held him by the legs, which were round her waist, so as to occasion considerable stress to the parts. He was carried home and complained of the left thigh and haunch, which he said was from a fall from his sister's back. The parents being poor, and imagining it to be only bruised, were eighteen days before they called any assistance. At this time I found him lying in bed on his back, the fore part of the femur turned quite in, the knee lying on the right thigh, was fully four inches shorter, the leg turned out and considerable tension and swelling on the hip. From the appearance, I suspected a fracture at the neck of the bone; but on examining it was soon convinced of the dislocation, and that the head of the bone was lodged upward and backward from the acetabulum, in the concave part of the ilium where it joins the ischium. The smallest attempt to carry the thigh outward from the position in which it lay, gave him the most exquisite pain, and he could only allow it to be gently moved upward, if at the same time, the knee was kept over to the right side. From the motion made to discover the situation, he complained so much, that the reduction was not attempted at that time. The hip was fomented, rubbed with camphorated oil, and a poultice applied for that night. Next forenoon I called on him with two young gentlemen; he was placed across the bed, the thigh raised so as to form an acute angle with the trunk. In this situation the knee lay considerably over to the right side, and the leg was turned much outward. He was kept down by an assistant, while I laid hold, with both hands, above the knee, at the same time standing upon the side of the bed and pulling upward, I found I could move the head of the bone from the place where it was lodged; and upon making considerable extension, with my left hand, which I brought inward. By this the femur made a circular turn, which directed its head toward the acetabulum, into which it went with a sensible noise. The boy immediately cried out, that he was well, and could allow the thigh to be moved gently in any direction.

The thighs were kept together for two weeks with a bandage, and, in three weeks, he could walk; but he complained of stiffness in the joint for a week or two afterward."—*Medical Commentaries, published at Edinburgh, 1776, vol. ii, pp. 261-4.*

(To be Continued.)

ART. III.—*Chronic Pleuritis.* Cases reported by ADDISON NILES, M. D.,
Lockport, New York.

CASE I. March 27, 1857, visited James Trowley, æt. 13, native of England. From his mother I learned the following facts:

In infancy he was afflicted with a cutaneous eruption on the scalp, attended by an exfoliation of bone, having a depression still observed. The cure of the eruption was followed by a chronic diarrhoea, and discharges from the ears; from this time he has been an invalid to a greater or less extent. During the nine years past he has had more or less cough, pain and soreness in the left side, which were increased by taking cold.

One year ago last May, he was confined to the bed about three weeks, with fever, cough, and pain in the left side, which has always been in one location, occupying a space of about six inches in breadth, commencing at the nipple and extending to the base of the chest. The cough, debility and pain continued through the summer. He has now been confined to the bed about five weeks; has cough, pain in the left side, difficulty of respiration, and diarrhoea. He is supported in bed with his chest considerably elevated. Respiration 40 in a minute; pulse 120; face and lips blanched; feet, ankles and integuments, on the left side of the chest, cedematous; stomach very irritable, vomiting easily provoked by food and medicine. The left side of the chest measures three-fourths of an inch more than the right. On percussion it is dull throughout the whole extent; the sound on the right side is clear. The heart pulsates considerably to the right of the sternum. No respiratory murmur can be heard on the left side, except for a small space near the spine. On the right the respiration is puerile, and râles are heard indicating bronchitis. The urine is scanty, specific gravity 1.010 and highly albuminous.

The history of the case, symptoms, and physical evidence, clearly indicate chronic pleuritis with effusion. In forming a prognosis, the question arises, are the kidneys permanently diseased? The strumous and anæmic appearance of the patient, his long-continued ill-health, the albuminous urine, effu

sion into the cellular tissue, irritable stomach and diarrhoea, tend to establish the probability of Bright's disease.

On the contrary, no renal epithelium, casts or oil globules can be detected by a careful examination of the urine by the microscope. The long-continuance of the cough, and pain in the chest; the recent occurrence of symptoms indicating renal affection, justify the belief that the disease of the chest is the primary one, and that the albuminuria is the consequence of contamination of the blood, arising from the absorption of pus or other fluids from the chest. Taking this view of the case, the prognosis is favorable, notwithstanding the formidable appearance it presents. The operation of paracentesis thoracis was proposed, and agreed to by the patient and his parents.

March 28. Visited him with Dr. Stork, who kindly assisted in the operation. Anæsthesia having been induced by a mixture of equal parts sulphuric ether and chloroform, the integuments of the chest were drawn outward by an assistant, an incision made one inch and one-half in length over the centre of the eleventh rib, near the junction of the posterior third with the anterior two-thirds of the chest. The skin being dissected upward to the upper margin of the rib, a puncture was made with the point of a lancet, and a trocar and canula passed into the chest. The trocar having been withdrawn, about one quart of healthy pus passed away; some air now entering the canula was withdrawn, and the integument which was raised up, allowed to fall down and close the orifice. Adhesive straps were applied, leaving the edges of the wound apart so as to prevent adhesion, and an opiate administered.

29th. The patient rested well, and feels better to-day. The canula is again introduced, and one pint of pus discharged, and a tent inserted to keep the orifice open. Thirty drops of tincture of chloride of iron is prescribed to be taken thrice a-day after meals; and one tablespoonful of the following mixture, thrice a-day, two hours after meals, and an anodyne at night:

℞ Olum morhuæ, ℥jv.
 Olum carni, 3j.
 Vitellium oir, j.
 Pulv. sacchari albi, ℥ij. Mix.

The four successive days, the tent was withdrawn, and about eight ounces of pus passed each time.

April 4. The tent is removed, and a gum-elastic tube adapted to a stomach pump introduced, and one quart of pus pumped out.

5th. Eight ounces removed in the same manner.

6th. The tent is withdrawn and two ounces passed from the orifice.

From this time, for ten days, the tent was daily removed, and on an average four ounces of pus passed away.

14th. Symptoms much improved; appetite good; the cedema removed, but complains of pain in the right side.

Continue the oil and iron, and direct that the tent be daily removed and the matter be withdrawn by a catheter.

26th. Patient worse; no matter has passed for four days; difficulty of breathing increased and appetite wanting.

Introduced the tube, and by the pump drew out one pint of fetid pus.

28th. Patient better, although complaining of pain in the side.

29th. The catheter was again introduced, and about six ounces of bloody purulent fluid pumped out.

June 1st. Considerable pain was caused by the last operation. From this time the mother was directed to withdraw the tent daily, and allow the matter to flow through the elastic catheter.

Aug. 1st. The orifice has been closed about one week; about ten days previous to its closure the discharge was serous. The urine is now free from albumen, and the heart pulsates on its normal situation, and the vascular murmur is heard through the whole extent of the chest. The left side measures one-fourth of an inch less than the right. The chest is considerably flattened from the nipple downward to the base of the chest. The appetite, general health, and strength, are quite restored. A slight cough and expectoration still continues in the morning, and râles occasionally heard on the right side, indicating some degree of bronchitis.

The patient advised to continue the cod liver oil.

CASE II. July 12, 1842, performed the operation of thoracentesis on a son of John Connor, of Howard, Steuben Co. The patient, a boy of about 8 or 10 years of age, who had previously been under my care with an attack of acute pleuritis, which passed into a chronic stage. The disease affected the left side, which was considerably enlarged, and the heart was pushed to the right of the sternum. The operation was performed as described in case first, and about three pints of pus passed from the orifice; a tent was then inserted, and afterward daily withdrawn, to allow the matter to pass out. The treatment was tonic and alterative, and the patient, after a protracted illness, perfectly recovered, and was well when last heard from.

CASE III. March 3, 1849 Operated for paracentesis thorasis, on a son of Thomas Morrow, of Bath, Steuben Co., 8 or 9 years old. This patient was affected when I first saw him, with chronic pleuritis, of the left side, which was visibly enlarged, the heart pulsating to the right of the sternum. The operation was performed as in Case I, and about one quart of pus passed through the orifice; a tent was inserted and withdrawn at intervals of one, two three, four or seven days, and an elastic tube adapted to a stomach pump introduced, and the matter withdrawn by the pump. When the matter was suffered to remain as long as seven days, the patient was much worse; but was always decidedly relieved by pumping out the fluid. No memorandum having been made at the time in this case and Case II, the treatment can only be given from memory. Cod liver oil was the most important remedial agent administered. This was continued until his health was restored, since which time he has continued well, as far as I have heard.

CASE IV. April, 1857, visited J. D., of Italy Hill, a girl about 10 years of age, in connection with Dr. Elisha Doubleday, of Italy Hill, and the late Dr. Wisner, of Penn Yan, both eminent practitioners. The patient was suffering from chronic pleuritis, with effusion; and having at times febrile symptoms. The operation was performed by Dr. Wisner, by puncturing the chest with a lancet; a large quantity of pus passed away, and a tent was introduced and subsequently withdrawn from time to time, in order to discharge the matter. The patient recovered for the time, but afterward removing from the place her subsequent history is unknown.

CASE V. In the summer of 1848, visited G. D., aged about 23, in connection with the attending physicians, Drs. E. Doubleday and Wixom.

This case exciting more than common interest, an unusual number of practitioners were called in consultation. Among those were Dr. A. B. Case, of Howard, the late Dr. Oliver, of Penn Yan, and Dr. Rush Spencer, of Geneva. This case of pleuritis, although chronic in its nature, presented febrile symptoms occasionally. Thoracentesis was performed in my absence by the physicians in attendance; about two quarts of fluid, &c., discharged, which on cooling became gelatinous.

This gentleman fully recovered, and, I believe, continues well.

CASE VI. July 24, 1850, performed the operation of paracentesis thorasis, at my office, in Bath, on John A. Van Wie, of Howard, Steuben Co., aged 25 or 30 years, who was suffering from chronic pleuritis, and drew off

one quart of pus by the stomach pump adapted to a flexible tube. On the following day he returned and I attempted again to introduce the catheter, but the orifice being closed it caused considerable pain, and the patient left before the operation was completed, and did not again return. No further attempt was made to evacuate the chest, so far as I know. He died some months after.

Remarks. The above cases of chronic pleuritis complete the list of patients on which the operation of thoracentesis was performed by myself, and others under my observation. Judging from my limited experience, I should say the operation may be performed in every case of chronic pleuritis with a good prospect of success, where the disease is not complicated with some more grave disorder; and that the operation should be performed early, as soon as it is manifest that the effusion is purulent; or if serous that the fluid cannot be safely left for absorption. The early removal of the effusion brings the two surfaces of the pleura in contact, and favors a cure by adhesion, besides permitting the lung to expand, and preventing albuminuria which may occur from absorption of the fluid.

CASE VII. *Chronic Pleuritis of the left side terminating in death by Pleuro-pneumonia on the right.*

E. W. Lewis, a prominent and much respected merchant of this town, in the 52d year of his age, was attacked with pleuro-pneumonia the latter part of April last. The acute attack commenced by a chill and fever, followed with a stitch in the left side, and a short suppressed cough and difficulty of respiration. This patient had been in bad health since some time in August, 1856, when he was attacked by a nervous difficulty in the left side. He complained of an unnatural sensation in the upper and lower extremities, and at times in the whole side. He frequently spoke of a sensation of pressure and pinching in the left side, and sometimes a feeling as though the skin and cords were too tense. He had several attacks of neuralgia in the left side of the face and head. These symptoms existed in connection with disorder of the digestive organs. About three weeks before this attack, a short cough and some difficulty of breathing occurred; the latter was aggravated in paroxysms. The pneumonia was latent in its character, and could be detected by physical evidence only. During this attack he could not rest comfortably in a recumbent position; this, together with difficult respiration, and a short cough continued, although considerably relieved at times, to the

termination of life. The acute inflammation subsided in about two weeks, under the ordinary treatment. The appetite returned, and other evidences of convalescence.

Shortly after this time the left side of the chest became perceptibly enlarged, and on measurement was found one-fourth of an inch larger than the right, on which the respiration was purile, and the sound on percussion clear, while it was quite dull in the inferior part of the left. The difficulty of breathing now became very distressing, especially at night, accompanied with belching of gas from the stomach. The pulse was increased in frequency especially in the after part of the day, numbering 100 in a minute. It now became quite evident that although the disease of the lung had subsided, the inflammation of the pleura had become chronic.

These symptoms were decidedly relieved by the operation of a hydrogogue cathartic, and by counter-irritants, alterative diuretic remedies; but the relief was not permanent; in the mean time the appetite was good, and only temporarily impaired by cathartic remedies. These symptoms continued, though in a somewhat mitigated form up to the 26th of June, when the case passed from my observation.

Shortly afterward a slight diarrhoea occurred, and the belching of wind subsided; but the other symptoms, with a gradual failure of strength, continued. In the last weeks of his life albuminuria occurred, with œdema in the entire lower part of the body and left arm. About two weeks preceding death the appetite failed, and during the last week he expectorated rusty colored matter, complained greatly of want of breath.

August 24th. The body was examined, which was considerably emaciated; the left side of the chest measured one-fourth of an inch less than the right. The lower portion of the body, with the lower extremities, were cedematous. On opening the chest the right side was found to contain several pints of serous fluid, which appeared to be made up of serum and some blood, with flakes of coagulated lymph. The fluid was situated in the inferior part of the chest, pushing the lung upward and inward. The diaphragmatic and the inferior portion of the costal pleura of the right side, was intensely red and rough, and portions of it covered with deposits of lymph still soft.

The right lung exhibited the effects of inflammation; the lower portion of the inferior lobe was hepatized. The pleura of the left side was red and injected, and a few ounces of clear serum found in the cavity. The left lung was free from disease. The kidneys were examined, but no morbid appearance was observed. The abdominal viscera appeared healthy.

Remarks. Chronic pleurisy is often mistaken for dropsy of the chest, and a correct diagnosis is of great importance, not only in its therapeutic relations, but likewise in deciding the question of thoracentesis, which is rarely called for in the latter disease. According to the late as well as the older authorities, the two diseases are not only individually distinct, but belong to an entirely different class of disorders: pleuritis to inflammation, hydrothorax to dropsy.

Dr. Flint, in his valuable work on the respiratory organs, says: "Serous effusion within the pleura not due to inflammation, constitutes the affection called hydrothorax. The effusion is purely serous, i. e. serum unmixed with inflammatory products." This definition is sustained by Laennec, Stokes, Dunglison, and Watson, and every authority who has written specially on diseases of the chest which I now have at hand to refer to.

Dr. Flint says, "it is never primitive or idiopathic. It always occurs as an effect or complication of some other disease, and in the great majority of cases coexists with structural lesions of the heart and kidney."

Dr. Stokes says, he "has never seen a case of idiopathic hydrothorax." With Dr. Flint's clear definition before him, it seems scarcely necessary for the most inexperienced practitioner to err on this point.

Dr. Copland says: "Although pleurisy may terminate in and give rise to effusions in many instances, yet the grade of organic action is not the same in both," i. e. pleuritis and hydrothorax.

Dr. Wood states "that cases considered as idiopathic hydrothorax, are probably, in most instances, cases of high inflammatory irritation of the membrane, which has not yet reached the point of *inflammation*, simply because the vessels have relieved themselves by effusion."

Dr. Gross, in writing of acute pleuritis, says: "The quantity of the fluid poured out in this affection, varies from a few drachms to several quarts." He likewise states that "in a patient, fifty-two years of age, suffering from chronic pleuritis, he drew off full two gallons," while the quantity found in dropsy of the chest is usually small. It is quite unnecessary to assume the instance of the latter disease to account for effusion, in any case of inflammation of the pleura. To suppose that idiopathic dropsy of the chest could coexist with pleurisy, would be absurd, because it presumes the existence of two different kinds of organic action, at the same time, and in the same place. Most of the errors in diagnosis on this point, have probably arisen from admitting the idea of idiopathic hydrothorax. Rejecting this imaginary form of the disease, there is little danger of mistake. Before the existence of dropsy of the chest can be admitted, it must ordinarily appear that a general

dropsical diathesis, or some organic disease of the heart, kidney, or some mechanical obstruction to the circulation existed previous to its occurrence. So far as I have observed, some degree of febrile action and pain have occurred in every case of chronic pleurisy, while in dropsy of the chest they exist only as a complication, or depend on the organic cause, which gives rise to it.

The prognosis in chronic pleuritis is ordinarily favorable; but not so with hydrothorax, because it is in most cases the consequence of some incurable organic disease.

ART. IV.—*Reports of Cases treated in the Male Medical Ward of the Buffalo Hospital of the Sisters of Charity, AUSTIN FLINT, M. D., Attending Physician, during the College Session of 1856-7, being from October 1, 1856 to February 18, 1857. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. VIII. Acute Lobar Pneumonitis. Treatment,—Opiates and Stimulants.

It is not intended, in this article, to enter into a discussion of the various methods of treatment employed in acute lobar pneumonitis. That there is a remarkable diversity of opinion in regard to the treatment of this disease in our latitude, is well known. And as we are about to bring forward the methods of treatment employed and the results afforded in a few cases of this disease, it should be remembered, that it is not our intention to proscribe other plans of treatment such as frequently have been advised and adopted. Whatever may be the conclusions we form, of the disease under consideration, it should ever be borne in mind that pneumonitis may occur as an idiopathic or symptomatic affection. Does it not often exist as a symptomatic disease, due perchance to a morbid condition of the blood, and much more frequently than is generally supposed?

Besides, it should be remembered, that mere recollections of the results of any peculiar method of treatment, are more or less influenced by the opinions entertained of the nature of the disease and the success attending the employment of the favorite remedies, in a greater or less number of instances, as the case may be.

Those conclusions, however, which are derived from cases duly recorded, are such as no previous bias of the mind can affect: and by means of them, the preconceived value of favorite plans of treatment is either confirmed or

disproved. We desire, at present, to direct the attention of the reader, to the course, termination, and treatment pursued in eleven cases of this disease which were admitted into the hospital, during the past winter and spring.

All the patients were adult males; the youngest being 19 and the eldest 36 years of age. In two cases, the disease occurred in connection with prior tuberculous deposit, probably. In one case, the patient had been suffering from an attack of intermittent fever. And in the remaining eight cases, the disease was uncomplicated or simple.

In these eleven patients, with a single exception, the disease terminated in recovery; in this instance, the pneumonitis was progressing favorably, when the sudden supervention of other disease, probably pericarditis, caused the death of the patient.

Of the eight uncomplicated cases, all of which ended in speedy recovery, in one the inflammation was latent and no diagnosis was made until the eighth day after the attack; the entire right lung being affected, and yet no symptom was presented of sufficient importance to direct attention to the chest; this patient was up and walking about the ward most of the day. In another case admitted eight days after date of attack, symptoms existed closely resembling those presented in typhoid fever; this patient was treated with those remedies ordinarily made use of in the latter disease, and rapidly improved under such treatment.

Four other cases presented delirium manifested by incoherent talking and muttering, and by attempts to get out of bed: the delirium in one of these cases may have been due to an absence of accustomed stimulus. In one case, there was no delirium present nor any unusual phenomenon of this disease. And in the remaining case, the inflammation had ceased before admission to the ward.

In four of the foregoing eight cases, the patients had no medical treatment prior to their admission. One of these four, entered on the sixth day, two on the eighth day, and one on the twelfth day after the date of attack; the latter patient was convalescent when admitted. In one other patient, the only treatment which had been made use of, was the application of large sinapisms to the affected side, which produced extensive vesication; no less than seventy square inches of the cutaneous surface having been blistered at the same time.

Of the two cases of pneumonitis supervening upon tuberculosis probably, both had had previous medical treatment: after their admission, they were placed on the use of cod liver oil, sulphate of quinia, and a sustaining diet, consisting of essence of beef and milk porridge, with a small quantity of

brandy. One of these patients was pronounced convalescent on the eighth day, and returned to work on the seventeenth day after the date of attack. In the other patient who had been bled before his admission, convalescence took place on the fourteenth day, and he left the hospital on the twenty-second day after the date of attack.

Of the remaining nine cases, four had medical treatment prior to their admission: one of these patients who had had intermittent fever, was bled and blistered before he entered the hospital. The treatment of these nine patients after entering the ward, was as follows: brandy and nutritious diet, with or without Dover's powder, in two cases; sulphate of quinia, with cod liver oil or with Dover's powder, in two cases; brandy, accompanied with opium in large doses, in one case; tartrate of antimony and potassa, followed by opium in large doses, in one case; opium in large doses, in two cases; and Dover's powder in the case convalescent on admission.

In the two cases in which a diffusible stimulant, such as brandy, was the main article of treatment: no medical treatment had been received prior to their admission. Delirium existed in both cases. One of these patients, who presented symptoms resembling those of typhoid fever, was treated with brandy *f. 3ss*, every three hours, and Dover's powder; immediate improvement was observed, and convalescence took place on the fourteenth day after date of attack; and twenty days thereafter, he was discharged from treatment. The other patient entered on the sixth day after the date of attack, with delirium, the pulse being 72, and the respirations 20; physical signs showed inflammation of the lower lobe of left lung. This patient was placed on the use of brandy *f. 3ss*, every three hours, with the sustaining diet previously mentioned. He progressively and rapidly improved; on the eleventh day after the date of attack, he was convalescent; and on the next day, he walked away from the hospital.

Of the four cases in which opium was chiefly relied on, three had received medical treatment before their admission. Delirium existed in three of these four patients. In that case in which brandy was employed, accompanied with large doses of opium, the patient entered five days after date of attack; the lower lobe of the left lung was in the second stage of the disease or solidified. Alternately with a small quantity of brandy, two grains of opium every three hours, were given. The patient improved daily; and on the eleventh day after date of attack, he was convalescent. In that case in which antimony was first given and followed by opium in large doses, the patient had been extensively vesicated on the affected side, by the application of mustard. He entered on the seventh day after date of attack; the lower

lobe of the left lung was solidified. After the use of antimony for two days, opium in doses of one grain every three hours, was given. Convalescence took place on the sixteenth day after date of attack.

In order to show more fully the beneficial effects attending the use of brandy in the two cases in which it formed the chief means of treatment, we will introduce these cases, merely presenting the symptoms afforded on the day the brandy was employed and on the day or days succeeding its administration.

Likewise, in the two cases in which opium was the main article of treatment, we will present the symptoms on the day the opium was administered and on the day following, illustrating, thereby, in a striking manner, the favorable change in the condition of these patients, resulting from the use of this medicine.

A few words, however, are necessary in reference to the expressions "date of attack" and "period of convalescence" employed in the preceding analysis. By the term "date of attack," is intended to express the very first manifestations of disease, such as the chill followed by febrile movement, or vomiting, or lancinating pain commonly referred to the region of the nipple, or cough. These phenomena may be presented some days previous to any *marked* symptoms referrible to the chest, or before the patient is obliged to take to the bed. By the term "period of convalescence," we mean, that particular time at which the patient exhibited *marked* improvement. This may be before the patient is able to be out of bed, as generally is the case; but, it may not be observed until a few days after the patient has been up and dressed. In pneumonitis, there is frequently an indisposition to take to the bed, and a great desire to get up, even during the height of the inflammation. In one of the foregoing cases, the patient continued to walk about the ward most of the day, although the entire right lung was inflamed. And in another instance, the patient persisted in the attempt to rise from the bed and dress himself, although the lower lobe of one lung was then solidified.

Two Cases of Simple Acute Lobar Pneumonitis, showing the beneficial effects of Brandy.

CASE A. March 18th, W. N., aged 19, admitted on the eighth day after date of attack, having had no previous medical treatment. Aspect dull; considerable capillary congestion of face but diffused, also of backs of hands. Answer questions readily and intelligibly. Complains of thirst, and of pain in lower portion of left side of chest, and in the right iliac region. Has

slight cough and moderate expectoration of opaque, rusty sputa. Respirations 40; pulse full, but compressible, numbering 108. Skin hot and dry; tongue protruded slowly and withdrawn slowly, moist and coated; sordes on the teeth and lips. Has no headache, no tinnitus aurium. Has no nausea, nor vomiting, nor diarrhoea. Has no appetite. Tenderness on pressure in right iliac region; no eruption present. Lies on the back, and sleeps most of the time. Slight manifestations of delirium. (Case supposed to be one of typhoid fever.)

Treatment. Brandy and water, of each f. ℥ss, every three hours; cough syrup f. ℥j; and Dover's powder, gra. x; cold to the head, and sustaining diet.

March 19th. Brandy had been faithfully administered. Rested well during the night; no delirium; less capillary congestion of face. Answers questions readily and intelligibly. Complains of no pain in chest, except during the act of coughing, and then in the same situation as yesterday. To-day, has not much cough and very little expectoration of sputa, same in character as yesterday. Skin cool and moist. Respiration 24; and pulse 80. Tongue coated, moist, but protruded readily; sordes on teeth and lips. Has no appetite. Tenderness in right iliac region still continues; has no diarrhoea; no eruption present.

(Above record, diagnosis, and treatment, by Nichols.)

This morning, (the chest being examined by Dr. Flint,) unmistakable evidence of inflammation of the lower lobe of left lung were afforded.

The same treatment was continued; and speedy convalescence took place.

In this case, under the use of brandy, observe the daily improvement of the patient; the typhoid symptoms disappearing rapidly. Notice also the reduction of the pulse: first day, 108; second day, (brandy having been given,) 80; next record, 76; day of convalescence, 64. Likewise, the respirations were diminished: first day, 40; second day, 24; next record, 20.

CASE B. November 25th, I. B., aged 23, admitted on the sixth day after date of attack, having had no prior medical treatment. Record, two days after admission. Has been delirious at night and, during part of yesterday, talking incoherently. Was placed yesterday on the use of brandy f. ℥ss, every three hours, and sustaining diet. This morning, he reports much better. His mind is perfectly clear. Pulse 72 and respirations 20. Skin warm and mellow. Frequent cough with bloody expectoration small in amount.

An examination of the chest disclosed inflammation of lower lobe of left lung in its second stage.

The same treatment, and only that, was continued. Progressive and rapid improvement took place; and on the fifth day after his admission, he was convalescent.

(Above record by Nichola.)

In this case the sudden disappearance of the delirium, under the use of brandy, is worthy of observation. The improvement in other respects, was as rapid as in the first instance, if not more so.

Two Cases of Simple Acute Lobar Pneumonitis illustrating the marked improvement of the Patients under the use of large doses of Opium.

CASE A. June 8th, M. D., aged 36, has been addicted to intemperance of late; presents a pallid and morbid aspect; is considerably emaciated. Was attacked with chills, &c., on 28th ult; pain, cough, and expectoration, first occurred on the 1st inst.

"He now presents an appearance of anxiety and prostration. The respirations are 42. The *alæ nasi* dilate moderately. Pulse 120, quick and vibratory. Tongue thinly coated, dry and swelled at the extremity. Sordes on the teeth. No delirium. Expectoration, tenacious, not opaque, not abundant, presenting a reddish yellow color, pretty uniformly diffused."

The physical signs, on examination of the chest, showed inflammation of the entire right lung.

The treatment was gum opium, two grains every six hours, and a small quantity of ale.

The next day, the record runs thus: "His aspect is greatly improved. Pulse 104, more volume and force; respirations 26."

June 11th. Reports better and aspect greatly improved. Pulse 80; respirations 28 and not labored. The tongue is clear and somewhat dry. No delirium. No pain, except in both shoulders and arms. Expectoration adheive, not opaque, and greenish. Dejection this morning. Has some appetite."

The same treatment had been continued.

This patient rapidly improved, and was convalescent ten days after he entered the hospital.

CASE B. July 2d, I. M., aged 32, had intermittent fever a year ago; but since his present illness, has not had any chills, with rigors, till yesterday.

He was admitted this morning, and appeared to be in the cold stage of an intermittent, having chills and severe rigors.

"He has been confined to his bed about twelve days. He was attacked suddenly with pain in the side, and fever. His mind is apparently dull and confused. * * * * He has been bled, and very extensively blistered over the chest in front and on the right side. The pulse is now 145, and rather full. The skin is warm. Tongue thickly coated. Respirations 36. He has cough and expectoration, character of the latter not observed. He states, that he is a very hard drinker, and has of late drank very freely."

A physical examination of the chest disclosed inflammation affecting the entire right lung.

The treatment was: sulphate of quinia, grs. v, and pulv. opii, grs. ij, every four hours; brandy f. ℥j, every four hours, with sustaining diet.

The following day, "He reports much better; and his aspect was greatly improved. Passed a quiet night; no manifestations of delirium. Pulse 120; with considerable volume; respirations 32. Has had several small dejections. Tongue coated in centre and clean at edges. Has no appetite, but complains of thirst. The cough is not frequent or severe, and expectoration small. A single sputum examined, is distinct and opaque, without any rusty tinge."

The next day, improvement continues. "Pulse 100, and respirations 26. Has had several small evacuations since the last record."

In these two cases, the rapid improvement of the patients under the use of large doses of opium, *from eight to twelve grains in twenty-four hours*, was very striking.

The effect on the pulse and respirations, is to be noticed. In the first case, on day of admission, the pulse was 120; respirations 42. He was placed on the use of opium. On the second day the pulse fell to 104, and the respirations to 26. Third day, pulse 80; respirations 28, but not labored.

In the second case, on the day of admission, the pulse numbered 145, and the respirations 36. The use of opium having been commenced, on the second day, pulse 120; respirations 32. Third day, pulse 100; respirations 26.

In this case it will be observed, that *diarrhœa* continued, although the patient was taking two grains of opium every four hours.

Addenda. The following case of acute lobar pneumonitis affecting the lower lobe on the left side and the middle lobe on the right side, has come under observation since writing the foregoing. This patient is now under treatment at the hospital, (Oct. 13th.) As this case illustrates

in such a striking manner, the marked improvement following the use of morphia and a small quantity of stimulus, that we leave to give the case in detail:

F. B., aged 26 years, was admitted to hospital on 26th of Sept., 1857. Dr. Flint's service commenced on the 1st of October.

The first record of this case was not made until the 5th of October, owing to the number of patients in the ward, the commencement of new services, &c. On that day, the patient presented over the right side of chest and abdomen, and over the lumbar region, a pustular eruption, not very copious, discrete, and presenting all the characteristics of ecthyma. He had had since the 1st of Oct., a cough, and was unable to speak above a whisper; but his cough was less urgent and his speech was returning.

On the 6th, the record runs thus: "He has now recovered his voice and is not hoarse. Cough and expectoration continue. He had yesterday a paroxysm of fever; a chill, febrile movement, and sweating. To-day he has diarrhoea."

There appeared nothing worthy of record in this case until the 10th of Oct. The patient keeping the bed all the time, and reporting about the same each day.

Oct. 10th. Yesterday, about 12 o'clock, this patient was suddenly attacked with pain in the region of the right nipple; the pain was sharp and lancinating, and obliged him to suppress his breathing. He had a chill, vomited, and lost his appetite; cough and expectoration appeared.

This morning, he appears to be delirious; was talking incoherently during the night. (Attendant states that he has been delirious for the past two nights.) There is slight circumscribed capillary congestion of cheeks; face otherwise pallid. Complains of pain, sharp and severe, in both sides of chest, but most in the right; the pain is increased by the acts of coughing and forced breathing. Cough frequent and painful; expectoration copious, and chiefly of clear mucus, not rusty. *Respirations* 36; *pulse* 102. Skin warm and mellow.

The weakness of the patient prevented a prolonged examination of the chest. The following is the record by Prof. Flint: "This patient presents notable dullness on percussion, and bronchial respiration over the lower lobe of left lung. He also presents on the right side, over lower scapular region, bronchial respiration; but not below. On both sides, dry and moist mucous râles. The crepitant râle was not observed; but owing to feebleness and irritability, he was not examined minutely. He was probably attacked with

pneumonitis affecting the left lung, on the 6th inst. The symptoms did not direct attention to the chest, and a physical examination was not made. He has now pneumonitis in the second stage, affecting the lower lobe of left lung; and pneumonitis on the right side, commencing yesterday, which has not yet involved the whole of the lower lobe.* Bronchitis coëxists."

The treatment was morphine sulph., gr. $\frac{1}{4}$, every six hours.

Oct. 11th. On the evening of the 10th, this patient was visited by myself. He was actively delirious, talking incoherently, raising himself up, and attempting to get out of bed. *His respirations were 36, and pulse 100.* Skin bathed in perspiration. As the patient appeared to be rapidly sinking, and the delirium being active, the treatment of the morning was slightly modified. The *morphia was increased to gr. $\frac{1}{4}$, every four hours; and whisky f. $\mathfrak{z}$ ss, every three hours.*

This morning there is a *marked improvement.* The aspect is much better. *The mind is clear. The respirations are 24, and the pulse 80.* The expectoration was quite abundant, and highly characteristic: it cannot well be described. Physical signs about the same; the patient's condition preventing an extended examination of the chest.

Treatment. Morphine sulph., gr. $\frac{1}{4}$, every six hours; and whisky f. $\mathfrak{z}$ ss, every four hours; with sustaining diet.

Oct. 12th. Reports much better. Slept most of the night. Was delirious for a short time, however. This morning, his mind is clear; aspect much improved; answers questions correctly; is not as irritable as he was yesterday morning; is disposed to sleep, when not disturbed. No capillary congestion of cheeks; face pallid; tongue moist and coated. Skin cool, and bathed in perspiration. *Respirations 20; pulse 76.* Cough frequent; expectoration more clear, less rusty.

Treatment. Morph., gr. $\frac{1}{4}$, every eight hours; and omit whisky.

The prognosis in this case, is favorable; the result will be given hereafter.

Excluding this case, and the two cases in the foregoing report, which were probably complicated with prior tuberculous deposit, both of which left the hospital cured of the pneumonitis, there occurred but one death in the remaining nine cases. It is a noteworthy fact, that these twelve cases include all the patients treated for pneumonitis during Prof. Flint's service, for a

* In a day or two after this record, it was discovered that the inflammation of the right lung was confined to the middle lobe.

period of—not more than—thirteen months altogether.† The total number of patients treated during the last college session, a period of about twenty weeks, from the beginning of October to the middle of February, was 128: of this number, seven were cases of pneumonitis, five of these being cases of simple acute lobar pneumonitis. The proportion of cases of this disease to the whole number of cases treated, was quite small, less than four per cent.

In not one of the twelve cases, did blood-letting, general or local, form a part of the treatment after their admission to the hospital; and in only two or three instances, did it enter into the treatment prior to their admission. This is offered simply as a fact; no influence prejudicial to the employment of depletion generally or locally, should be drawn from the above statement; neither must it be considered as an expression of Prof. Flint's views respecting the utility of depletion in this disease.

It will be noticed that some of these cases received no active treatment being brought to the hospital or found in the ward with physical signs retrospective of acute lobar pneumonitis. A few cases were treated by stimulants; whilst others proceeded to a favorable termination under the use of opiates. No case illustrating the beneficial effects of opium or its preparations, in a more striking manner than the last instance.

ART. V.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, Oct. 6, 1857.

The association met.

Present—The President, Dr. Flint, in the chair. Drs. Hamilton, Newman, Lemon, Hawley, Nichell, and Nichols.

The secretary being absent, the reading of the minutes of the last meeting was dispensed with.

Dr. A. W. Nichols was appointed secretary pro. tem.

There were no committees in readiness to report.

Dr. Lemon then read the following report:

Prostration and Coma, the effects of Fatigue, and Exposure to the Heat of the Sun.

On Friday, the 17th July last, at noon, I saw Thomas Burns, aged 8 yrs. He was in a deep stupor; strong aqua ammonia being held to the nostrils

† That is, from April, 1856 to May, 1857, and part of October, 1857.

made no impression, neither calling his name nor shaking would rouse him in the least.

The countenance was pale, the surface and extremities cold, the head about the natural temperature. Pulse 120, and quick respiration, labored but not stertorous.

His mother said he had been in the habit of playing about the docks and bathing frequently.

In the morning about 9 o'clock, he was seized with headache, vomiting and purging; these symptoms soon subsided and he gradually fell into the state of stupor described. Believing him to be laboring under the disease known as "sun-stroke," I treated him by means of the hot bath, ice to the scalp, sinapisms and brandy.

After having been in the bath about ten minutes he became conscious, moaned, opened his eyes, and struggled; brandy was then given, the patient removed to bed, wrapped in blankets, and mustard applied to the feet, insides of the thighs and to the epigastrium; ice pounded in a towel had been previously applied to his head, but soon removed.

In an hour from the time of his immersion, he could answer questions, protrude his tongue, and complained of the sinapisms. In two hours I left him comparatively comfortable.

The father told me next day, that the boy fell into a natural sleep soon after my departure, from which he awoke quite well. On that day, the thermometer, as noted at "Matthew's Dispensary," stood at 80° at noon.

There were several other cases in town the same week, one of which proved fatal. A St. Louis paper reports thirteen inquests held on the bodies of those having died from the effects of heat, on the 17th July.

The highest temperature this summer in Buffalo was on the 14th July, when the mercury rose to 93°.

In New York city, on the 14th of August, three men were prostrated in the afternoon, two died the same evening, the other lingered till next day. The thermometer ranged from 92 to 94°.

On that day at Augusta, Georgia, the mercury rose to 106° at noon.

Baltimore at noon, 94°.

Philadelphia, at 3, P. M., 94½°.

Albany in the afternoon, 97°.

Boston at mid-day, 92°.

The atmosphere has been moist, and the temperature lower on the average, than it has been for years before.—*Ext. from N. Y. Herald, August 15, 1857.*

The Daily Tribune for August 17th, reports nine deaths from "*coup de soleil*," August 14th and 15th.

Six were working on buildings, one in a sugar refinery, one a washerwoman, and one a collector of rents. All occurred in the afternoon, some died the same evening, others not until the same day. To the collector stimulants had been given, "Drs Mott and Moses" made a post-mortem examination, but the results are not given further than that in their opinion death was caused by exhaustion, the effects of heat and over exertion.

A business man on the docks has stated to me that he had often seen stevedores discharging cargoes, drinking freely of cold water, and perspiring copiously, suddenly become weak, sick, pale and cold, and lie down to sleep.

Great fatigue seems generally to precede an attack of "*solar exhaustion*," as a body of soldiers on a long march, laborers discharging cargo, sailors, &c., &c.

"A body of soldiers, mostly recruits, during a long march, were exposed to the rays of an East Indian sun; towards evening men were seen to drop down and immediately expire; others less severely attacked, were saved by timely and copious bleeding; but notwithstanding every exertion, at the close of the day, eighteen had died and sixty-three were sick.

"The loss, with one exception, was confined to the recruits, as was also all the sickness that followed.

"No examinations were made after death.

"In the beginning patients complained of dyspnoea, tightness and oppression about the chest, followed by giddiness; burning heat of the eyes; sense of fullness about the head, in many amounting to excruciating pain, succeeded by loss of sense and motion; faltering of the tongue in attempting to speak; dilated and fixed pupils; violent twitching of the muscles of the face; subsultus tendinum; involuntary stools; strong, full, and frequent pulse; tremendous throbbing of the carotid and temporal arteries; flushed, swollen, and sometimes livid countenance; and throughout a parched and burning skin.

"The treatment consisted of profuse depletion, blood being abstracted from the arm jugular vein and temporal artery; cold and blisters to the head; hot water foot-baths; calomel and antimony.

"Venesection was carried '*ad deliquium*,' or to the relieving of the patient.

"It was found sometimes from fifty to one hundred ounces were required to produce this effect, and that sometimes the remedy was worse than the disease, for though the first attack might be relieved, yet subsequent symp-

toms required the same profuse evacuations, and from previous loss of blood the patient was not in a condition to bear such depletion. In fact, two individuals became convulsed, and died shortly after they were bled.

"After death it was found that although the heart was empty, the vessels of the head were loaded with blood. After this, the head was shaved, the body being wrapped in blankets, and no blood being abstracted until the pulse rose, and general heat and reaction had ensued."—*Extract from a Madras Medical Journal.*

We may, perhaps, be warranted in assuming the existence of two forms of the disease, the conditions being opposite, but produced by the same influences, governed by the physical state of the subject attacked.

In one case we may have congestion of the brain, and coma from pressure, fullness of the vessels, and general heat of the surface.

In another, all the conditions are opposite, the patient being in a state of collapse, hence the necessity of discrimination in respect to treatment in this as in any disease which may assume the sthenic or asthenic form.

Prof. Hamilton presented a specimen of *chronic rheumatic arthritis* occurring in the thigh-bone of a cow, which had been sent to him by Dr. Crosby, of Dartmouth, N. H. It has all of the characteristic appearances of this disease as we see it in the human subject. The head of the bone is flattened and expanded, and at certain points highly polished. The neck is also shortened and expanded; and around the neck, close to the trochanters, there is a large exostotic deposit. He was not aware that this disease had ever been observed before in other animals than man. In man it is not exceedingly rare. It occurs in persons who are advanced in life, either as an idiopathic affection, or as a consequence occasionally of a fall upon one of the trochanters, and for this reason it is occasionally mistaken for a fracture of the neck of the femur; and especially since it is followed by a gradual shortening of the limb, as in certain examples of intra-capsular fractures, we shall recognize the person who is suffering with this malady by his peculiar walk. It is a waddle. He moves, or rotates his body from side to side, in progression, because there is very little motion in the hip-joint.

Prof. H. thinks the disease is a chronic inflammation of the bone, and that the head and neck becoming softened, assume this abnormal shape in consequence of the pressure of the body upon the head. There may be some amount of interstitial absorption to explain the shortening of the neck, but it is quite as probable that the shortening is in a great measure a result of mere mechanical pressure, acting upon the bone when it is softened.

Prof. H. related some experiments he had made on chickens, in reference to the bending of bone. There had been, and was still, a difference of opinion in regard to the bending of bone; some surgeons, as Dupuytren, Barton, and Norris, regarded the bending of bone as a not uncommon occurrence. Dr. H. thinks that in all cases of alleged bending of bones, there is to a greater or less extent, interstitial fracture; or a fracture of some of the fibres within the bone.

The tibiae of fourteen chickens, five or six weeks old, were bent to an angle of at least twenty-five degrees. In nine, there occurred no crack on bending, and in each case the bone resumed its place immediately. The inference from this experiment, making due allowance for the differing circumstances of the human bone and the bone of the bird, was that *bent bone* would resume its place immediately. It is to be observed that in these nine instances, no mark remained, nor any node or swelling existed. Dissection was made in from three to ten days. In no instance could Dr. H. detect any injury, except a small blood clot in the centre of the bone in a few cases.

The remaining five bones cracked when bent, and only one resumed its place. In two or three days thereafter, a distinct node-like swelling was felt. In dissecting the bones, from three to ten days after the partial fracture, the point of fracture was palpable; there was ensheathing callus at the seat of fracture. Dr. H. infers that if a bone, being partially broken, straightened spontaneously, it would leave indications of fracture. In those bones which were bent only, no sign of fracture was felt. Malgaigne admits that bones will bend and *remain* bent; but there must be a parallel bone broken completely to hold them. If no such broken bone held them or there was no partial fracture, the bent bones would resume their places. Dr. H. agrees with Malgaigne in this opinion. There are specimens of *bent bone*, but they occurred under the above circumstances.

The specimen which resumed its place after cracking, illustrates a class of cases which are found in the human subject. Although the axis of the bone is straight, there is a node-like swelling found. It is a partial fracture of the bone. Malgaigne and Blandin are the only authorities who have referred to this fact. In Dr. H.'s report to American Medical Association, were related cases of partial fracture of clavicle, in which the line of axis was immediately restored. The bone was partially broken, as the node-like swelling proved. This happened in the case of the clavicle in one out of every four cases. In these experiments, in one out of every five cases. The harmony between his observations in practice and in these experiments, is striking and should go far to establish the correctness of the opinions ad-

vocated above. A more more detailed account of these experiments will be found in the New York Jour. of Med, for Nov., 1857.

Dr. H. stated that in the above cases there was not much displacement; nor is there at any time much displacement of bone when broken by muscular action. In all the instances of bending merely, the chickens did not walk lame.

Dr. Nichols remarked that these experiments tended to confirm the opinion that bending of bone without fracture, was almost impossible, at least very rare, in the human body. The bone of birds differed essentially from that of the infant even, and in all cases of bending in which the bone did not resume its place immediately, there would be in almost every point of view, a greater likelihood to find fracture in the human subject, than in the bones of the chicken.

Prof. Hamilton farther stated, that no person has shown a specimen of bent bone, except under the circumstances above related; they are *always* cracked on one side.

The President suggested the propriety of admitting medical students to the meetings of the association.

Prof. Hamilton introduced the following resolution, which was carried without opposition:

"Resolved, That members be permitted to invite medical students to be present at the meetings of the association, but not to take part in the transactions."

And the association then adjourned.

AUSTIN W. NICHOLS,
Secretary *pro tem*.

ART. VI.—*Clinical Reports of Diseases, Injuries, Surgical Operations, &c., &c., in the Male and Female General Surgical and Private Wards of the Buffalo Hospital of the Sisters of Charity.* Care of Prof. HAMILTON, for the winter half year commencing Oct. 1st, 1856. By BENJ. H. LEMON, M. D., formerly House Surgeon.

(Continued from Page 215.)

CASE X.—*Vesico-Vaginal Fistula. Operation.*

Mrs. H., aged 27 years, of Niag. Co., was admitted to a private ward, December 11th, 1856.

She had a vesico-vaginal fistula, produced several years ago in her first

labor. It was situated a little back of the neck of the bladder, the longest diameter transversely; it was about an inch in length, and half an inch in breadth.

The urine constantly dribbled away, and she suffered extremely from excoriations.

The operation consisted in freely paring the edges of the fistula, by means of a pair of long forceps and a knife, and then introducing three strong silk sutures.

The operation was made without the aid of anæsthetics, and with the patient lying on her *back*.

The instruments employed were constructed for the purpose, with long handles. In carrying the sutures, the longinversed needles were found especially useful, they were inserted a quarter of an inch or more from the edge of the opening.

The patient was kept on her *belly* for several days after the operation, the urine being drawn away by a metallic catheter kept constantly in the bladder.

The sutures were removed at various periods, but none of them within the first week.

The operation has proved perfectly successful so far as the closure of the fistula is concerned, but she has still some incontinence of urine.

Dr. Hamilton believes that the common interrupted suture, which he has always employed in these operations, is equal to any other form of suture, and that success depends, mainly, upon attention to three points:

First. The free incision, or paring of the edges of the fistula.

Second. The introduction of the sutures remote from the edges, plunging the needle deep into the tissues, taking care, however, not to include the vesicle mucous membrane, so as to bring a large amount of raw surface into coaptation.

Third. The adoption of the *prone* posture after the operation has been completed, to be persevered in for several days, the urine being constantly drained off by the catheter, thus preventing it coming in contact with the wound.

CASE XI.—*Organic Stricture of a portion of the Membranous and Bulbous Tract of the Urethra, impregnable to any instrument. Remedy by external incision.*

Henry Compton, aged 28 years. Admitted Jan'y 12, '57.

This patient suffered much from an irritable bladder and urethra, since the age of fourteen. The difficulty constantly increased, and for two years he has been unable to void his urine in a full stream, the great irritability of the bladder and canal causing him to make the attempt many times during the day and night, and often not more than an ounce at a time was evacuated; and at other times, a little guttatim, any imprudence in diet greatly aggravated the difficulty. He was incapable of engaging in any employment, and his life rendered miserable, the greater part of his time being occupied in voiding his urine, his general health also becoming much impaired from sleepless nights and constant pain. He had never been treated by any surgeon.

He remained in the house a month, during which time repeated attempts were made to pass various sized steel sounds through the stricture, at intervals of several days, whilst under the influence of anæsthetics, but at no time could any instrument be got to pass further, with a warrantable degree of force, than just anterior to the belly.

Alkaline and mucilaginous drinks were prescribed.

Prof. Hamilton finally decided to operate by "external incision."

Feb. 16th, surgical clinic day, the patient was placed in the position for lithotomy, and chloroform administered. It excited him at first, and he struggled and cried out, but soon fell into a deep sleep. A steel sound was then passed down the urethra to the point of obstruction. Dr. Hamilton then having introduced the index finger of his left hand into the rectum, cut down on the perineal tissues, including the bulb, to the beak of the sound, one of the arteries of the bulb was cut, the hæmorrhage was considerable, and the artery was tied.

The strictured canal was then sought for, and after much difficulty, found; it was scarcely larger than pack-thread, occupying about four or five lines of the membranous, and an equal extent of the bulbous tract of the urethra being an "elongated, annular stricture."

The tissues were divided as far as the narrowed canal extended, and the sound passed into the bladder; it was then withdrawn, and a No. 10 silver catheter introduced, and tapes attached to retain it in a proper position.

I visited him early the next morning, and found him in a severe chill, the teeth chattering, and the whole body trembling violently, and groaning like one in the cold stage of an intermittent fever; the paroxysm had continued ten minutes; he had had one in the night which had lasted fifteen minutes.

Directed hot brandy, and a warm blanket.

On examination it was found, that through change of posture, the cath-

ter had become displaced, and the tapes were pulling it to one side and forcing it in in a manner to cause the beak of the instrument to press on the internal coat of the bladder with considerable force; this was, in all probability, the cause of the chills. As soon as the catheter was adjusted the chill ceased.

The urine flowed from the end of the catheter — none came through the wound.

A cork was placed in the end of the catheter, and the dresser directed to remove it at intervals, and keep the instrument carefully adjusted.

Third morning. He had no chills since yesterday; on removing the cork the urine flowed; the wound was in good condition, and no urine had passed through it.

The patient continued to do well up to the close of Dr. Hamilton's service at the end of February; the wound healed kindly, and I understand that no water ever passed through it.

The catheter, however, became obstructed at one time, with mucus and pus; to avoid the risk of great difficulty, and to spare the patient the pain of returning the instrument, should it be withdrawn, Dr. Hamilton applied his mouth to the end of it, until the obstructing substances were removed.

I saw the man after his discharge from the hospital at the end of near three and a-half months after the operation; his general health is greatly improved, and he can void his urine in *a full stream*, to the distance of several feet, and suffers no inconvenience, except from an irritable bladder, which causes a desire to urinate frequently: he is slowly improving in this respect.

There is yet a ligature to come away. I advised a bullet to be attached to it, to facilitate the process, or an elastic string, attached to the thigh by adhesive plaster.

The virile functions are unimpaired.

Mr. Syme states, in a paper to the Royal Medical and Chirurgical Society, "that whenever urine can pass through the urethra, an instrument may be made to do so, not perhaps at once, and with ease, but *always* through time and proper management."

Other eminent surgeons, who were present, Travers, Hutchison, and Coulson, did not concur in this view.

It is, indeed, difficult, either in medicine or surgery, to lay down any general rule that will not be frequently liable to exceptions, as the foregoing case is an exception to that of Mr. Syme.

There was an "elongated annular stricture," the urethral canal almost ob-

literated by the thickening and condensating of the tissues, occupying parts of the bulbous and membranous tracts of the passage, complicated by the pouch or "cul-de-sac" at the bulb, the triangular ligament, and the angle which the urethra here takes.

ART. VII.—*Encephaloid Disease of the Antrum, Ligation of the Primitive Carotid Artery. Removal of the Superior Maxillary and portions of other bones, with the diseased mass.* By Prof. HAMILTON. Reported by BENJ. HEATON LEMON, M. D.

Jan'y 20th, 1856. Mr. A. M., aged 50 years, an intelligent farmer of Smithville, Canada, consulted Prof. Hamilton respecting a "tumor on the right side of his face, and in the roof of his mouth."

On the cheek it was about as large as a medium sized orange, but projected somewhat less in the mouth.

The disease was first observed three or four months ago, but the greater part of its present size has been attained during the last month.

Dr. Hamilton diagnosed cancerous disease of the bone, and advised the speedy extirpation of the parts involved.

Jan'y 25th, the operation was performed, Drs. Boardman, Fitch and Lemon assisting.

Dr. Hamilton observed that there was a considerable increase in the size of the tumor since he first saw it, four days before, and the patient said that for the last two or three days, everything he had eaten seemed to have an offensive taste. On examination the mucous membrane was found abraded with an offensive exudation from the tumor.

The skin over the tumor was sound.

The patient was stripped, placed on a table with his head opposite a good light, and made to inhale a mixture of chloroform and sulphuric ether, until he had fallen into a profound sleep.

Having first ligated the common carotid artery, Dr. Hamilton proceeded to remove the diseased parts. The upper lip was divided by scissors at a point opposite the lateral incision, and the incision continued a little above the wing of the nose.

A second incision was made from the angle of the lower jaw, about two and a-half inches in length, thus making a triangular flap, which, upon being raised and dissected up toward the eye, afforded a good view of the part to be removed. With the bone forceps the jaw was then divided between the

lateral incision and the cuspid teeth, and the operation finished with curved chisels; several arteries were cut.

The greater part of the superior *maxillary*, part of the *palatine*, and the lower portion of the *malar* bones were removed with the diseased mass, the soft parts of which were of a brain-like substance.

The anæsthetics were now suspended, and the wounds dressed; he soon regained his senses, and complained very much when the sutures were introduced; he felt no pain during the previous operations. He went on to convalescence, and finally completely recovered, without any accident, and at the present time, twenty months after the operation, I do not learn that there is any symptom of the reëpearance of the disease. I believe he enjoys good health, and is competent to prosecute his ordinary business.

He has, I understand, experienced no ill-effects from the operation, other than a slight defect in speech, but for which, his friends say that they would not know any difference in him.

There is every reason, therefore, for general satisfaction, at the result of so formidable an operation, which by removing a malignant and loathesome disease, has at least prolonged his life, and we are not without encouragement that the malady will never return.

ART. VIII. — *Transactions of the Medical Society of the State of New York. Feb., 1857.*

Transactions of the New Hampshire Medical Society. June, 1857.

Transactions of the Medical Society of the State of Pennsylvania. May, 1857.

The transactions of state medical societies for the present year contain articles of more than ordinary interest, and are an indication of the steady advance which national medical science and literature are making in common with pursuits which more immediately engross the public attention. Notwithstanding the recent abridgement of the actual powers of medical societies, every high minded and honorable member of our profession must see that a gross violation of professional ethics brings its own reward; the respect and confidence of others, even of those who accept the sacrifice of professional standing, are not to be obtained by voluntarily relinquishing the good opinion of professional brethren, who have only the honor and dignity of their body at heart, and who are even more ready to defend and uphold

each other in the right, than to censure the wrong. Our societies cannot be called powerless then, when we hold together its *honorable* members by such bonds.

The last meeting of the New York State Medical Society, commemorated the semi centennial epoch of its existence, and the address of Dr. March, president for 1856, contrasts the advance of the science, of agriculture, physics, etc., from a date of fifty years ago, with that of medical science. In the account of important discoveries in medicine and a comparison of them with discoveries in other departments, he shows that though the last half century has seen the most important and useful improvements and discoveries which have everywhere crowned the labors of men, we are by no means behind hand. In pathology, animal chemistry, minute anatomy and diagnosis, all of which have so important a bearing on therapeutics, we have made advances which are on a par with the discovery of steam power and the magnetic telegraph. The diminution of mortality is a sufficient indication of its actual benefit to the human race. Dr. March quotes the following statement: "Formerly, toward the middle of the last century, fifty or sixty out of one hundred children born in London, died before they had reached their fifth year of age; but the mortality has gradually and steadily diminished, so that now not above thirty or thirty-five in every hundred, die at that early period." Dr. March further states "that in the latter part of the sixteenth century, one-half of all who were born died under five years of age; the average longevity of the whole population was but eighteen years. In the seventeenth century one-half of the population died under twelve years of age. But in the first sixty years of the eighteenth century, one-half of the population lived over twenty-seven years. In the latter forty years one-half exceeded thirty-four years. At the beginning of the present century one-half exceeded forty years; and from 1838 to 1845, one-half exceeded forty-three years. The average longevity at the successive periods has been increased from eighteen years in the sixteenth century to 43 $\frac{7}{10}$ by the last reports."

The increase of advantages for prosecuting the study of medicine, as effected by the multiplication of medical schools and hospitals is also exhibited; and this interesting address closes by expressing the confident hope that at the end of another fifty years our successors may be able "to leave on record an account of far greater and more numerous achievements in the arts and sciences and advancements of our profession, than it has been our privilege to record."

The next is an interesting historical address by Dr. Willard, giving an

account of the origin of the society fifty years ago, with sketches of the professional careers of the prominent physicians of New York State from Abraham Staats, surgeon, who emigrated from Holland in 1642, and settled at Fort Orange, to Dr. Joel A. Wing, whose likeness accompanies the present volume.

After an Eulogy on Samuel McClellan, M. D., prepared by Dr. Blatchford, a biographical sketch of the late Moses Hale, M. D., by Dr. Brinsmade; a biographical sketch of Dr. John McClellan, by Dr. Bates, and of Dr. Henry Mitchell, by Dr. Augustus Willard, which our limits compel us merely to mention, we have a paper on cholera-infantum, diarrhoea, and entero-colitis—their relation to each other—their pathology and treatment, by Edward H. Parker, M. D., of New York. In this paper the author attempts to disprove the position, that cholera infantum is a disease peculiar to this country. We know that cholera infantum is not a disease of the country districts, and that it selects for its victims (I say victims, for an examination of the vital statistics of large cities, shows an immense proportion of deaths from this malady,) the inhabitants of large cities, and children of parents who are compelled to live in unventilated and crowded situations, frequently giving their children insufficient nourishment, and that not of the best quality. These causes we know to exist in European cities to as great, if not a greater extent than here, and the author is disposed to think that the disease described by West as "inflammatory diarrhoea," and by others as "entero-colitis," is in some of its forms identical with the cholera infantum of this country. The author states that "neither writer uses the word cholera infantum, but West calls it inflammatory diarrhoea." It is true that in the first edition of his work on children, West makes no mention of the disease by the name of cholera infantum; but in his second edition, 1854, in speaking of the occasional rapid termination of the disease, he states: "This rapidly fatal termination is far from unusual in some of the Southern States of America, where diarrhoea, under the various names of *cholera infantum*, summer complaint, or gastro-follicula enteritis, annually destroys many thousands of children." Thus we have a direct acknowledgment of what Dr. Parker labors to prove. After an account of the mortality of this disease in different parts of the United States, the author discusses the point of a pathology distinct from diarrhoea and entero-colitis, he assumes that it is difficult or impossible to mark the line when an aggravated diarrhoea becomes a cholera infantum, or wherein lies the difference between it and an acute and sudden attack of entero-colitis. Diarrhoea is one of the chief symptoms of cholera infantum, so it is often marked in typhoid fever, but because typhoid fever was accom-

panied by diarrhoea, we would not call the disease by a name which applied only to a prominent symptom.

Again, enterocolitis is, no doubt, frequently the result of cholera infantum, but it is shown by the highest authorities that it frequently occurs as a disease, and that probably in the first stages of cholera infantum, it is not present, as there we frequently have no febrile movement whatever. Several other interesting points relating to the pathology of this disease are discussed in this paper, but our space forbids us to notice them. The article is valuable as a contribution to an interesting subject which is hardly sufficiently spoken of in the books, and as recommending a course of treatment as perfect as any which has been recommended.

There are many other interesting reports in this volume which we are compelled to pass by.

The first article in the Transactions of the Penn. Medical Society, is the Annual Address, by its president, Dr. R. La Roche.

Anything emanating from the graceful pen of Dr. La Roche is sure to repay an attentive perusal, as much for the pleasure which we experience from contrasting its chaste and elegant style with the dry and formal details which we are compelled to undergo in many medical productions, as for the information and sound sense which we always find connected with it. But we were hardly prepared for the great pleasure which we experienced by a careful reading of this address, and regret that we are not able to give our readers the benefit of a fuller and more comprehensive review.

After commenting on the advantages which individuals derived from meeting together to discuss matters of common professional interest, especially those who were so situated as to be cut off from constant mingling with brother practitioners, thereby lacking "the vivifying influence of emulation," the author mentions the immediate object of the organization of the body which he was then addressing, which was the production of harmony among the rival medical factions of Philadelphia. He draws a graphic picture of the social relations which existed between the Philadelphia physicians forty years ago: street fights, the weekly meetings of the medical society, at which "the science of Billingsgate seemed to have taken precedence of all others," insulting attacks in the public journals, medical and secular, and other proceedings of a kindred character, which have been the source of so much ridicule from time immemorial. This society was then organized by the late Dr. Samuel Brown, and established by the initiation of four physicians, Prof. Jackson, Prof. Meigs, Dr. Thos. Harris, of the navy, and Dr. La

Roche. "A promise, modeled in a great measure on the oath of Hippocrates, was exacted of each member at the moment of his admission—to obtain which an unanimous vote of those present was necessary. By this promise the member bound himself to live in peace and harmony with, and to do everything in his power to promote the welfare of his brethren in and out of the society, and to abide implicitly by a stringent code of ethics that had been prepared for our guidance."

This organization produced the desired effect, all difficulties were adjusted, and science moreover was advanced by the spirit of emulation which was excited among its members. The society then answered its purpose, and now stands as a monument that doctors can be made to agree, in a measure at least.

The doctor now proceeds to deprecate the opinion among most persons, and not a few members of our profession, concerning *practical* men so called, and men who are interested in the advancement of science sufficiently to wish to know what is done every day for its promotion; men who are called book-learned, theoretical, etc., but not practically equal to the emergencies which we meet at the bed side. Nothing could be more appropriate than the remarks of Dr. La Roche on this point: would that every physician and every patient could read and appreciate them. Not only in regard to every day practice and practitioners are these remarks applied, but to men of genius who might become lights and ornaments to the profession. He refers here to the expressed views of Sprengel on this subject: "When the observer, says the great historian of medicine, whatever be the extent of his genius, has nevertheless not enough of erudition to be acquainted with the observations of his predecessors, he runs the risk of repeating what has already been said a hundred times before, and of publishing it as his own discovery." The Dr. then draws a faithful picture of the difficulties which a medical practitioner has to encounter, the annoyances to which he is subjected, and the length of time which must generally elapse before he can gain the confidence of the community, which is often when he has arrived at an age when he is hardly physically able to undergo the fatigues to which he is subjected. "How can he sustain himself under the influence of those depressing circumstances; how can he emerge, as it were, from obscurity, and contribute to the improvement of the science which he cultivates, unless he be buoyed up by a more than usual degree of energy of character and of professional zeal?" It is this zeal, this enthusiasm which he must have. The "Diable du corps—the sacred fire—the demon of genius." It is this enthusiasm which has impelled our great men to devote their lives to indus-

trious seeking after knowledge; it is this which has prompted the noble acts of self-sacrifice to which Dr. La Roche alludes, and of which we are justly so proud, the devotion of physicians during the plague in olden times. "The two surgeons left at Jaffa by Bonaparte, to attend the pestiferous soldiers, whom he was forced to abandon." The "noble army of martyrs" who sacrificed themselves at Norfolk; with numerous other instances which show the self devotion of all high-minded physicians to their profession and to their fellow creatures.

The present policy of medical schools is then canvassed, the want of more thorough examination of candidates; and especially the absence of requirement of at least a fair education on the part of students, before they are permitted to enter the medical profession. He thinks that many young men are now drawn from less intellectual employments which are better adapted to their education and mental endowments, to the profession of medicine, by the cheap and especially free schools which are scattered over the country. No one can deny that the ranks of the profession are filled with men who would, perhaps, have made excellent cobblers or tailors, but who in their present position only contribute to reduce the standard of the profession and bring upon it popular discredit; these men have taken advantage of some neighboring country and, perhaps, free school, to employ the winter, when they have nothing else to do, to become *doctors* forsooth, and such doctors.

We cannot forbear quoting, before closing this notice, some of the remarks of Dr. La Roche on quackery as it exists in this country. In speaking of quackery in Europe as compared with the evil in this country, he says:

"But neither in England nor on the continent of Europe, are the members of the medical profession elbowed and circumvented and openly branded, as it were, by such low-bred, ignorant, and unprincipled quacks, as those by whom we are here infested. Nowhere is the market so overstocked with secret and other quack nostrums. The quack doctors in England are for the most part licensed graduates, who have taken to the nefarious practices after obtaining a diploma in some regular medical school. They are, of course, either fools or rogues, but still they are not uneducated men, and there is less disgrace in being placed on an equal footing with them by the public, than we are made to experience in this land of liberty. Here a physician—even of the highest eminence—is regarded in a professional and social point of view, not only as an erring graduate, but as the most arrant empiric and ignorant booby and rogue that may be pleased to assume the office and title of doctor."

Again, in speaking of the opinions of quacks as received by the public, he says: "Their opinions on professional subjects are cited in opposition to those of eminent practitioners and profound pathologists. Their testimony on points of medical jurisprudence, involving the reputation, liberty, and life of individuals, is received in courts of justice with as much deference as that of the most learned physicians and medical jurists."

How true is all this, and how few are they among our readers who have not experienced the annoyances and degradations to which we are subjected by being classed with such as are here described. The task of throwing off the incubus of quackery which weighs upon our country, seems hopeless indeed when some of the most intelligent persons (in other matters) still sanction it with their countenance and confidence. Were we rid of one form, we would have another, and we may now expect at any moment another monstrous humbug to supplant homœopathy, which now is on the decline.

The Report of a Committee on Vaccination and Vaccine Virus. This report, as well as a report on the same subject in the Transactions of the New York State Medical Society, recommends strongly the more general employment of vaccination and revaccination, and urges the necessity of some legislative action in the matter which will make it required by law as much as is possible; certainly some of the superfluous public funds could not be employed for a nobler purpose.

The rest of the transactions is composed of reports of country medical societies, containing articles of interest and importance, but which we cannot notice much in detail.

In the report of the Blair County Medical Society, we notice a report of the introduction of typhoid fever into a previously healthy district, where there can be no doubt but that it was propagated by contagion. The details very much resemble an account of the importation of typhoid fever into the town of Boston, twenty miles from Buffalo, mentioned by Prof. Flint in his work on Continued Fever, and was reported to the American Journal in 1845.

The Transactions of the New Hampshire Medical Society, contains the Annual Address, by the president, Francis P. Fitch, M. D., on the Want of Sanitary Knowledge; Report of Committee on Surgery, by Geo. H. Hubbard, M. D.; Nursing Sore Mouth, by Dr. Pray, orator for 1857; Report on Practical Medicine, by Wm. H. Brown, M. D.; The Contributions of Quackery to True Medical Science, by Thos. H. Marshall, M. D.; Report of the Corresponding Secretary, Levi G. Hill, M. D.; and Miscellaneous Obser-

vations in Obstetrics and Diseases of Women, by William Henry Thayer, M. D.

These reports are interesting and of value. The report on surgery, by Dr. Hubbard, shows to a gratifying extent the improvements in conservative surgery during the last few years. Our object is now to save limb as well as life, and injuries are left to nature which were formerly sure to be remedied by the knife.

Dr. Pray's paper on nursing sore mouth, is worthy of an attentive perusal.

The report of Dr. Brown on practical medicine, is very brief, and strikes us as being a little behind the age. The furious attacks which he deems it necessary to make upon a patient laboring under pneumonia or pleuritis, diseases which, in their uncomplicated form, it is now established are rarely fatal, is rather uncalled for, as his complaint is more his misfortune than his fault.

F.

ART. IX.—*Report of Mortality in Buffalo for the month of Sept., 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accident, ...	2	2	
Asphyxia Immersorum, ...	6	6	
Apoplexia, ...	1		1
Pulmonum, ...	1		1
Bronchitis, ...	2	2	
Coup de Soleil, ...	1	1	
Cholera Infantum, ...	45	26	15
Carcinoma, ...	4	2	2
Croup, ...	3	1	2
Cancerum Oris, ...	1		1
Cephalitis, ...	4	2	2
Dyspepsia, ...	1	1	
Diarrhoea, ...	26	16	10
Dysentery, ...	18	10	8
Dentition, ...	14	7	7
Debilitas Senilis, ...	3	1	2
Enteritis, ...	1		1
Eclampsia, ...	23	10	13
Puerperalis, ...	1		1
Epilepsy, ...	2	2	
Febris Typhoid, ...	5	2	3
Remittent, ...	2	1	1
Scarlatina, ...	6	2	3
Fractured Femoris, ...	1	1	
Gastritis, ...	1	1	
et Ulceratio, ...	1		1

REGISTER OF MORTALITY—CONTINUED.

DISEASES.	No.	Males.	Females.
Hydrops,.....	5	5	
Hydrocephalus,.....	8	4	3
Hæmoptisis,.....	1	1	
Hernia,.....	1	1	
Intemperance,.....	2	1	
Ignotus,.....	19	7	11
Marasmus,.....	20	12	8
Murder,.....	1	1	
Morbus Cordis,.....	4	3	
" Hepatitis,.....	1		1
" Brightii,.....	1		1
Paralysis,.....	1	1	
Premature Birth,.....	1	1	
Pertussis,.....	7	3	4
Pneumonitis,.....	5	5	
Purpura,.....	1	1	
Rheumatism,.....	1	1	
Rubeola,.....	2	2	
Spina Bifida,.....	1	1	
Scrophula,.....	1	1	
Still-born,.....	10	6	4
Stomatitis Materna,.....	1		1
Starvation,.....	1	1	
Tuberculosis Pulmonalis,.....	20	12	8
Total,.....	290		

SEXES.

Males,.....	165
Females,.....	115
Sex not given,.....	10

Total,.....290

AGES.

Still-born,.....	9	Between 20 years and 30 years,.....	20
1 day,.....	2	" 30 " " 40 " 	19
1 day and 30 days,.....	26	" 40 " " 50 " 	10
Between 1 month and 6 months,.....	43	" 50 " " 60 " 	10
" 6 months and 12 " 	50	" 60 " " 70 " 	2
" 1 year " 3 years,.....	68	" 70 " " 80 " 	4
" 3 " " 5 " 	9	" 80 " " 90 " 	0
" 5 " " 10 " 	7	" 90 " " 100 " 	0
" 10 " " 20 " 	9	" 100 " 	0

Total number under 10 years,.....214

Total number over 10 years,.....74

Ages not given,.....2

Total,.....290

NATIVITIES.

American, (white,).....	191	Prussian,.....	1
" (colored,).....	3	Saxon,.....	1
German,.....	50	French,.....	3
Irish,.....	29	Scotch,.....	2
English,.....	4	Poland,.....	1
Canadian,.....	0	Country not given,.....	5

Total,.....290

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS

On the Constitution and Physiology of the Bile.—By JNO. C. DALTON, Jr.,
M. D., Professor of Physiology and Microscopic Anatomy in the College
of Physicians and Surgeons, New York.

Notwithstanding the readiness with which the bile may be obtained for purposes of examination, the evident importance of the secretion, and the labor which has been bestowed upon it, it must be confessed that we are still very far from having a complete idea of its nature and function as one of the intestinal fluids. The present condition of our knowledge in regard to it, may be briefly summed up as follows: Since the analyses of Strecker, published in 1848 and '49, it has been known that the bile contains, as its essential and characteristic ingredients, two saline substances, the glykochole and the taurochole of soda; and that the organic acids of these salts, glykochole and taurochole acid, both contain nitrogen; and the latter, in addition to it, two equivalents of sulphur. Besides these peculiar or characteristic ingredients, the bile contains water, a coloring matter (biliverdin), cholesterin, saponifiable or saponified fats, chloride of sodium, earthy and alkaline phosphates, carbonates of soda and potass, and a variable quantity of mucus.

The biliary fluid, thus constituted, was for a long time regarded by many as a simple excretion, like the urine; taking no part in digestion, and destined merely to be expelled from the body. It could not, indeed, be shown to exert any such digestive influence on the alimentary substances, as belonged to the gastric and pancreatic juices; and its loss, when excluded from the alimentary canal, did not give rise to any very marked disturbance, certainly not to a suspension of the digestive process. But the experiments of Bidder and Schmidt* seem to have demonstrated conclusively that its presence in the alimentary canal is nevertheless essential to the continuance of life; since animals in which the whole of it is drawn off by a biliary fistula,

* *Verdaauungssäfte und Stoffwechsel.* Leipzig, 1852.

though they still feed and digest well, die after a few weeks, reduced to the last degree of debility and emaciation. What the changes are, however, which it undergoes in the intestine, or in what way it is made subservient to the nutritive functions, has never been definitely ascertained.

Bidder and Schmidt have suggested that the organic acids of the biliary salts were probably decomposed in the intestine, as they may be by boiling with caustic potash in a test tube; giving as the result glycine in the one case, and taurine in the other. But neither of these latter substances have actually been found in the intestine. Liebig again suggested that the bile, or at least its essential ingredients, might be reabsorbed from the alimentary canal, to undergo further modifications elsewhere; and Bidder and Schmidt have shown (*op. cit.*) that the feces of the dog do not contain sulphur enough to account for all the (sulphurous) taurocholic acid which is discharged daily with the bile into the intestine. These facts render it exceedingly probable, if not certain, that the bile is actually reabsorbed, under some form or other, from the alimentary canal; but further than that, there is little or nothing definite, with regard to its physiology, to satisfy the mind of the inquirer. All experimenters, who have undertaken the study of this secretion, have found it the most difficult of investigation of all the intestinal fluids; and yet its importance is so palpable, and its occurrence in different species, orders and classes of animals so universal, that it claims, and must continue to receive the special attention of the physiologist.

Within the past two years we have endeavored to clear up, so far as possible, some of the more obscure points with regard to the history of the bile, and to obtain somewhat more satisfactory notions with regard to its properties and function. The statements which are made in the following pages are derived from the results of sixty-seven different experiments, many of which comprised a series of secondary examinations, and occupied one or two days in their performance. We have examined more particularly the special constitution of the bile in different animals, the best mode of detecting it in intestinal or other fluids, the quantity and time of its discharge into the intestine, its reaction with the gastric and intestinal juices, and lastly its mode of disappearance in the alimentary canal.

Constitution and Chemical Properties of the Bile.—The essential ingredients of ox-bile are, as we have mentioned above, two peculiar saline substances, the glykocholate and the taurocholate of soda. They may be obtained in the following manner: The bile is first evaporated to dryness by the water bath. The dry residue is then pulverized and treated with absolute alcohol, in the proportion of at least 3j of alcohol to every five grains of dry residue. The filtered alcoholic solution has a clear, yellowish color. It contains, beside the glykocholate and taurocholate of soda, the coloring matter and more or less of the fats originally present in the bile. On the addition of a small quantity of ether, a dense, whitish precipitate is formed, which disappears again on agitating and thoroughly mixing the fluids. On the repeated addition of ether, the precipitate again falls down, and when the ether has been added in considerable excess, six to twelve times the volume of the alcoholic solution, the precipitate remains permanent, and the whole mixture is filled with a dense, whitish, opaque deposit, consisting of the glykocholate and taurocholate of soda, thrown down under the form of heavy flakes and granules, part of which subside to the bottom of the test

tube, while part remain for a short time in suspension. Gradually these flakes and granules unite with each other and fuse together into clear, brownish-yellow, oily, or resinous looking drops. At the bottom of the test-tube, after two or three hours, there is usually collected a nearly homogeneous layer of this deposit, while the remainder continues to adhere to the sides of the glass in small, circular, transparent drops. The deposit is semi-fluid in consistency, and sticky, like Canada balsam or half-melted resin; and it is on this account that the ingredients composing it have been called the "resinous matters" of the bile. They have, however, no real chemical relation with true resinous bodies, since they both contain nitrogen, and differ from resins also in other important particulars.

At the end of twelve to twenty-four hours the glykocholate of soda begins to crystallize. The crystals radiate from various points in the resinous deposit, and shoot up into the supernatant fluid in white silky bundles. If some of the crystals be removed and examined by the microscope, they are found to be of a very delicate acicular form, running to a finely pointed extremity, and radiating, as already mentioned, in bundles from a central point. As the ether evaporates, the crystals absorb moisture from the air, and melt up rapidly into clear resinous drops; so that it was very difficult to keep them under the microscope long enough for a correct drawing and measurement.

The crystallization in the test tube goes on after the first day, and the crystals increase in quantity for three or four, and even five or six days, until the whole of the glykocholate of soda present has assumed the solid form. The taurocholate, however, is uncrystallizable, and remains in an amorphous condition. If a portion of the deposit be now removed and examined by the microscope, it is seen that the crystals of glykocholate of soda have increased considerably in thickness, so that their transverse diameter may be readily estimated. The uncrystallizable taurocholate appears under the form of circular drops, varying considerably in size, clear, transparent, strongly refractive, and bounded by a dark, well defined outline. *They are not to be distinguished, by any of their optical properties, from oil globules as they usually appear under the microscope.* They have the same refractive power, the same dark outline and bright centre, and the same degree of consistency. They would be consequently liable at all times to be mistaken for oil globules, were it not for the complete dissimilarity of their chemical properties.

Both the glykocholate and taurocholate of soda are very freely soluble in water. If the mixture of alcohol and ether be poured off and distilled water added, the deposit dissolves rapidly and completely with a more or less distinct yellowish color, according to the proportion of coloring matter originally present in the bile. The two biliary substances present in the solution may be separated from each other by the following means. On the addition of acetate of lead, the glykocholate of soda is decomposed, and precipitates as a glykocholate of lead. The precipitate, separated by filtration from the remaining fluid, is then decomposed in turn by carbonate of soda, and the original glykocholate of soda reproduced. The filtered fluid which remains, and which contains the taurocholate of soda, is then treated with subacetate of lead, which precipitates a taurocholate of lead. This is separated by filtration, and decomposed again by carbonate of soda, as in the former case. The two biliary substances in ox-bile may, therefore, be

distinguished by their reactions with the salts of lead. Both are precipitable by the subacetate; but the glykocholate of soda is precipitable also by the acetate, while the taurocholate is not so. If subacetate of lead, therefore, be added to the mixed watery solution of the two substances, and the whole filtered, the subsequent addition of acetate of lead to the filtered fluid will produce no precipitate, because both the biliary matters have been thrown down with the deposit; but, if the acetate of lead be first added, it will precipitate the glykocholate alone, and the taurocholate may afterwards be thrown down separately by the acetate.

The biliary substances, however, are not the same in different species of animals. In examining the biliary secretions of different species, Strecker found so great a resemblance between them that he was disposed to regard their ingredients as essentially the same. Having established the existence in ox-bile of two peculiar substances, one crystallizable and non-sulphurous (glykocholate), the other uncrystallizable and sulphurous (taurocholate), he was led to consider that the bile in all species of animals as containing the same substances, and as differing only in the relative quantity in which the two were present. The only exception to this was supposed to be pig's bile, in which Strecker found a peculiar organic acid, which he called "hyocholic," or "hyocholinic" acid, in combination with soda as a base.

The above conclusion of his, however, was not entirely correct. The bile of all animals, so far as examined, does, it is true, contain peculiar substances which resemble each other in being freely soluble in water, soluble in absolute alcohol, and insoluble in ether; and in giving also a peculiar reaction with Pettenkofer's test, to be described presently. But, at the same time, these substances present minor differences in different animals, which show them not to be identical.

In dog's bile, for example, there are, as in ox-bile, two substances precipitable by ether from their alcoholic solution; one crystallizable, the other not so. But the former of these crystallizes much more readily than the glykocholate of soda from ox-bile. Dog's bile will not unfrequently begin to crystallize freely in five to six hours after precipitation by ether; while in ox-bile it is usually twelve and often twenty-four and even forty-eight hours before crystallization is fully established. But it is more particularly in their reaction with the salts of lead that the difference between these substances becomes manifest. For, while the crystallizable substance of ox-bile is precipitated by acetate of lead, that of dog's bile is not affected by it. If dog's bile be evaporated to dryness, extracted with absolute alcohol, the alcoholic solution precipitated by ether, and the ether-precipitate then dissolved in water, the addition of acetate of lead to the watery solution produces not the slightest turbidity. If subacetate of lead be then added in excess, a copious precipitate falls, composed of both the crystallizable and uncrystallizable substances. If the lead-precipitate be then separated by filtration, washed and decomposed by carbonate of soda, the watery solution will contain the reformed soda-salts of the bile. The watery solution may then be evaporated to dryness, extracted with absolute alcohol, and the alcoholic solution precipitated by ether, when the ether-precipitate crystallizes partially after a time as in fresh bile. Both the biliary matters of dog's bile are, therefore, precipitable by subacetate of lead, but neither of them by the acetate. Instead of calling them, consequently, glykocholate and taurocholate of soda,

we shall speak of them simply as the "crystalline" and "resinous" biliary substances.

In cat's bile the biliary substances act very much as in dog's bile. The ether-precipitate of the alcoholic solution contains here also a crystalline and a resinous substance, both of which are soluble in water, and both precipitable by the subacetate of lead; but neither of them by the acetate.

In pig's bile, on the other hand, there is no crystallizable substance, but the ether-precipitate is altogether resinous in appearance. Notwithstanding this, however, its watery solution precipitates abundantly by both the acetate and subacetate of lead.

In human bile, again, there is no crystallizable substance. We have found that the dried bile, extracted with absolute alcohol, makes a clear, brandy-red solution, which precipitates abundantly with ether in excess; but the ether-precipitate, if allowed to stand, shows no sign of crystallization, even at the end of three weeks. If the resinous precipitate be separated by decantation, and dissolved in water, it precipitates, as in the case of pig's bile, by both acetate and subacetate of lead. This might, perhaps, be attributed to the presence of two different substances, as in ox-bile, one precipitated by the acetate, the other by the subacetate of lead. Such, however, is not the case. For if the watery solution be precipitated by the acetate of lead and then filtered, the filtered fluid gives no precipitate afterward by the subacetate; and if first precipitated by the subacetate, it gives no precipitate, after filtration, by the acetate.

Different kinds of bile vary also in other respects, as, for example, their specific gravity, the depth and tinge of color, the quantity of fat which they contain, &c., &c. Pig's bile is of a nearly clear yellow color, human bile of a dark golden brown, ox-bile of a greenish yellow, dog's bile of a deep brown. The alcoholic solution of dried ox-bile does not precipitate at all on the addition of water, while that of human bile, pig's bile, and dog's bile, precipitates abundantly with distilled water, owing to the quantity of fat which it holds in solution. We have found the specific gravity of pig's bile to be 1030 to 1036; that of human bile 1018; that of ox-bile 1024. These variations, however, are of secondary importance in comparison with those which have been already mentioned, and which show that the crystalline and resinous substances in different kinds of bile, though resembling each other in very many respects, are yet in reality by no means identical.

Tests for Bile.—In investigating the physiology of any animal fluid, it is, of course, of the first importance to have a convenient and reliable test by which its presence may be detected. The only test which was for a long time employed in the case of the bile was that which depended on a *change of color produced by oxidizing substances*. If the bile, for example, or a mixture containing bile, be exposed in an open glass vessel for a few hours, the upper layers of the fluid, which are in contact with the atmosphere, gradually assume a greenish tinge, which becomes deeper with the length of time which elapses, and the quantity of bile existing in the fluid. Nitric acid, added to a mixture of bile and shaken up, produces a dense precipitate which takes a bright grass-green hue. Tincture of iodine produces the same change of color, when added in small quantity; and probably there are various other substances which would have the same effect. It is by this test that the bile has so often been recognized in the urine, serous effusions, the solid tissues,

etc., in cases of jaundice. But it is a very insufficient one for anything like accurate investigation, since the appearances are produced simply by the action of an oxidizing agent on the coloring matter of the bile. A green color produced by nitric acid does not, therefore, indicate the presence of the biliary substances proper, but only of the biliverdin. On the other hand, if the coloring matter be absent, the biliary substances themselves cannot be detected by it. For if the biliary substances of dog's bile be precipitated by ether from an alcoholic solution, dissolved in water and decolorized by animal charcoal, the colorless watery solution gives no green color on the addition of nitric acid or tincture of iodine, though it precipitates abundantly by subacetate of lead, and gives the other reactions of the crystalline and resinous biliary matters in a perfectly distinct manner.

Pettenkofer's Test.—This is undoubtedly the best test yet proposed for the detection of the biliary substances. It consists in mixing with a watery solution of the bile, or of the biliary substances, a little cane sugar, and then adding sulphuric acid to the mixture until a red, lake, or purple color is produced. A solution may be made of cane sugar, in the proportion of one part sugar to four parts water, and kept for use. One drop of this solution is mixed with the suspected fluid, and the sulphuric acid then immediately added. On first dropping in the sulphuric acid a whitish precipitate falls, which is abundant in the case of ox-bile, less so in that of the dog. This precipitate redissolves in a slight excess of sulphuric acid, which should then continue to be added until the mixture assumes a somewhat syrupy consistency and an opalescent look, owing to the development of minute bubbles of air. A red color then begins to show itself at the bottom of the test tube, where the drops of sulphuric acid accumulate, which disappears, however, on agitating the mixture. On continuing the addition of sulphuric acid, the red color returns and becomes general, till the whole fluid is of a clear bright cherry-red. This gradually changes to a lake color, and finally to a deep, rich, opaque purple. If three or four volumes of water be then added to the mixture, a copious precipitate falls down, and the color is destroyed.

Various circumstances modify to some extent the rapidity and distinctness with which the above changes are produced. If the biliary substances be present in large quantity, and nearly pure, the red color shows itself at once after adding an equal volume of sulphuric acid, and almost immediately passes into a strong purple. If they be scanty, on the other hand, the red color may not show itself for seven or eight minutes, nor the purple under twenty or twenty-five minutes. If foreign matters, again, not of a biliary nature, be also present, they are apt to be acted upon by the sulphuric acid, and by becoming discolored interfere with the clearness and brilliancy of the tinges produced. On this account it is indispensable, in delicate examinations, to evaporate the suspected fluid to dryness, extract the dry residue with absolute alcohol, precipitate the alcoholic solution with ether, and dissolve the ether-precipitate in water before applying the test. In this manner all foreign substances likely to do harm will be eliminated, and the test will succeed without difficulty.

It must not be forgotten, beside, that the sugar itself is liable to be acted on and discolored by sulphuric acid when added in excess, and may therefore by itself give rise to confusion. A little care and practice, however, will enable the experimenter to avoid any chance of deception from this source.

When sulphuric acid is mixed with a watery solution containing cane sugar, after it has been added in considerable excess, a yellowish color begins to show itself, owing to the commencing decomposition of the sugar. This color gradually deepens until it has become a dark, dingy, muddy brown; but there is never at any time clear red or purple color unless biliary matters be present. If the bile be present in small quantity, the colors produced by it may be modified and obscured by the dingy yellow and brown of the sugar; but even this difficulty may be avoided by paying attention to the following precautions. In the first place, only very little sugar should be added to the suspected fluid. In the second place, the sulphuric acid should be added very gradually, and the mixture closely watched to detect the first changes of color. If bile be present, the red color peculiar to it is always produced before the yellowish tinge which indicates the decomposition of the sugar. When the biliary matters, therefore, are present in small quantity, the addition of sulphuric acid should be stopped at that point, and the colors, though faint, will then remain clear, and give unmistakable evidence of the presence of bile.

The red color alone is not sufficient as an indication of bile. It is, in fact, only the commencement of the change which indicates the biliary matters. If these matters be present, the color passes, as we have already mentioned, first into a lake, then into a purple; and it is this lake and purple color alone which can be regarded as really characteristic of the biliary reaction.

Pettenkofer has given directions, as quoted by Lehmann, that the elevation of temperature in this experiment, naturally produced by mixing sulphuric acid and water, should not be allowed to exceed 120° F. This, however, is not by any means indispensable. We have often found the lake and purple colors to be produced with the greatest intensity, without taking any precaution to keep down the temperature, and while the test tube was still very hot. Used in this way, Pettenkofer's test may be regarded as of very valuable assistance in the detection of the bile. Its reaction takes place with the bile of all the different species of animals, so far as examined, and with a nearly uniform degree of intensity. It is much more certain and characteristic, therefore, than the test by nitric acid, or tincture of iodine.

Pettenkofer's reaction is produced by the presence of both, or either of the two biliary substances, crystalline or resinous, and is not dependent on the coloring matter of the bile.

1. The bile is evaporated to dryness, the dry residue extracted by absolute alcohol, and the alcoholic solution precipitated by ether. The mixture is then allowed to stand until the crystalline and resinous substances have both completely separated. The mixed alcohol and ether are then poured off, and the precipitate dissolved in distilled water and decolorized. The watery solution now gives Pettenkofer's reaction perfectly, though, as previously mentioned, it does not produce any green color with nitric acid and a tincture of iodine.

2. The ether-precipitate of the alcoholic solution of dried ox-bile is dissolved in distilled water. The glycocholate of soda is then precipitated from its watery solution by acetate of lead, separated by filtration, washed, re-composed by carbonate of soda, and again dissolved in water. The remainder of the filtered fluid is then precipitated by subacetate of lead, and the precipitate treated as before with carbonate of soda, and dissolved. The two wa-

tery solutions, one containing the glykocholate, the other the taurocholate of soda, both give Pettenkofer's reaction decisively and completely.

Various objections have been urged against this test. It has been stated to be uncertain and variable in its action. Robin and Verdeil (*Chimie Anatomique et Physiologique*.) say that its reactions "do not belong exclusively to the bile, and may, therefore, give rise to mistakes." Some fatty substances and volatile oils (olein, oleic acid, oil of turpentine, oil of caraway) have been stated to produce similar red and violet colors when treated with sugar and sulphuric acid. These objections, however, have not much, if any, practical weight. The test no doubt requires some care and practice in its application, as we have already pointed out; but that is the case, to a greater or less extent, with nearly all chemical tests, particularly those for organic substances. No other substance is liable to be met with in the intestinal fluids of the blood, which would simulate the reactions of the biliary matters. We have found that the fatty matters of the chyle, taken from the thoracic duct, when tried with Pettenkofer's test, do not give any coloration which would be mistaken for that of the bile. When the volatile oils (caraway and turpentine) are acted on by sulphuric acid, a red color is produced, which afterwards becomes brown and blackish, and a peculiar, tarry, empyreumatic odor is developed at the same time; but we do not get the lake and purple colors spoken of as above. Finally, if the precaution be observed of first extracting the suspected matters with absolute alcohol, then precipitating with ether, and dissolving the precipitate in water, no ambiguity could result from the presence of any of the above substances. The imperfection of the test does not, in fact, consist in its liability to cause other substances to be mistaken for the biliary matters, but in failing sometimes to detect small quantities of the latter when they are really present.

Pettenkofer's test is not a very delicate one.

If two drops of dog's bile be added to 3j of distilled water, and the mixture tried with Pettenkofer's test, it becomes deep cherry red in half a minute, lake in one minute, and a distinct opaque purple in four minutes.

One drop of dog's bile mixed with 3j distilled water, tried by the same test, becomes cherry red in two minutes and a half, and lake in four minutes; but there is no purple color, even at the end of an hour.

One half a drop of dog's bile with 3j distilled water, becomes, on the application of Pettenkofer's test, of a somewhat dingy cherry red within a minute; but there is no lake or purple at the end of an hour.

One quarter of a drop of dog's bile with 3j distilled water, on the addition of sugar and sulphuric acid, becomes immediately yellowish; but afterward only turns of a dingy yellowish brown, hardly, if at all, distinguishable from that produced with a simple solution of cane sugar in water.

Pettenkofer's test, therefore, cannot be relied on for the detection of very minute quantities of the biliary substances. Still it is the best we have, and an admirable one so far as it goes. All chemical tests are limited in this way, with respect to the delicacy of their application. Even Trommer's test for sugar acts very imperfectly with a solution of one-sixteenth of a drop of honey to the drachm of water; and with a solution of one-thirty-second of a drop to the drachm, fails altogether to detect the presence of sugar. Pettenkofer's test, then, if used with care, is extremely useful, and may lead to many valuable results.

With regard to the physiology of the bile, one of the first points which we have endeavored to examine, is the following: *At what period, and how constantly, is the bile discharged into the intestinal canal?* The experiments for this purpose were performed on dogs. The animals were kept confined, and killed at various periods after feeding, sometimes by the inoculation of woorara, sometimes by hydrocyanic acid, but most frequently by section of the medulla oblongata. The contents of the intestine were then collected and examined. In all instances the bile was also taken from the gall-bladder, and treated in the same way with the contents of the intestine, for purposes of comparison. The intestinal contents always presented some differences of appearance when treated with alcohol and ether, owing, probably, to the presence of other substances than the bile; but they always gave evidence of the presence of biliary matters as well. The biliary substances could almost always be recognized under the microscope in the ether-precipitate of the alcoholic solution; the resinous substance under the form of rounded, oily-looking drops, and the other under the form of crystalline groups, generally presenting the appearance of double bundles of slender, radiating, slightly curved or wavy needle-shaped crystals. These substances, dissolved in water, gave a purple color with sugar and sulphuric acid. These experiments were tried after the animals had been kept for one, two, three, five, six, seven, eight, and twelve days without food. The result showed that in all these instances bile was present in the small intestine. It is plainly, therefore, not an intermittent secretion, nor one which is concerned exclusively in the digestive process; but its secretion is constant and it continues to be discharged into the intestine for many days at least after the animal has been deprived of food.

The next point of importance to be examined relates to the time, after feeding, at which the bile passes into the intestine in the greatest abundance. Bidder and Schmidt (*op. cit.*) have already investigated this point in the following manner. They operated by tying the common bile-duct and then opening the fundus of the gall bladder so as to produce a biliary fistula by which the whole of the bile was drawn off. By doing this operation, and collecting and weighing the fluid discharged at different periods, they came to the conclusion that the flow of bile began to increase within two and a half to three hours after the introduction of food into the stomach; but that it did not reach its maximum of activity till the end of twelve or fifteen hours. Other observers, however, have obtained different results. Arnold, for example (in *Am. Jour. Med. Sci.*, April, 1856), found the quantity to be largest soon after meals, decreasing again after the fourth hour. Kölliker and Müller, again (in *Am. Journ. Med. Sci.*, April, 1857), found it largest between the sixth and eighth hours. Bidder and Schmidt's experiments, indeed, strictly speaking, show only the time at which the bile is most actively secreted by the liver, but not when it is actually discharged into the intestine. Our own experiments, bearing upon this point, were performed on dogs, by making a permanent duodenal fistula on the same plan that gastric fistulæ have so often been established for the examination of the gastric juice. An incision was made through the abdominal walls, a short distance to the right of the medium line, the floating portion of the duodenum drawn up towards the external wound, opened by a longitudinal incision, and a silver tube, armed at each end with a narrow projecting collar or flange, introduced into it by one extremity, five and a half inches

below the pylorus, and two and a half inches below the orifice of the lower pancreatic duct. The other extremity of the tube was left projecting from the external opening in the abdominal parietes, the parts secured by sutures, and the wound allowed to heal. After cicatrization was complete, and the animal had entirely recovered his healthy condition and appetite, the intestinal fluids were drawn off at various intervals after feeding, and their contents examined. This operation, which is rather more difficult than that of making a permanent gastric fistula, is nevertheless exceedingly useful when it succeeds, since it enables us to study not only the time and rate of the biliary discharge, but also many other extremely interesting matters connected with intestinal digestion. Of five animals operated on, we lost three, and succeeded in retaining a permanent fistula in two.

The results obtained from the experiments on these animals, may be summarily stated as follows. Twenty-four hours after feeding there flows from the fistula a small quantity of fluid, partly brownish and bilious-looking, partly colorless, nearly clear, and more or less frothy. These fluids are mostly neutral, or faintly alkaline, but sometimes have a slightly acid reaction. They come in starts and gushes, sometimes mixed, but very frequently alternating with each other. If the animal be then fed with a full meal (two pounds) of fresh lean meat, during the first fifteen minutes afterward a large quantity of nearly pure bile is poured into the intestine, mingled during the latter part of the time with some gastric juice from the stomach, containing a little albuminose in solution, which precipitates with the bile, forming an opaque bright yellow mixture. This second fluid soon becomes more abundant in proportion to the bile, precipitating a molecular sediment, and becoming less and less strongly colored. In half an hour to an hour, a fine debris of broken-up muscular fibres begins to pass out of the stomach into the intestine suspended in the gastric juice, forming a grayish, gruelly, fluid mixture, in which the proportion of bile to the other ingredients gradually diminishes. This continues from the second to about the twelfth hour, the proportion of muscular debris growing constantly greater, and that of fluid less, so that the mixture is considerably thicker, and more gruelly than a first. The entire quantity of the mixture, also, grows pretty constantly less until the twelfth hour. After that time, the mixture of muscular debris and gastric juice ceases more or less promptly, and the bile becomes again more abundant in proportion to the other ingredients. It is still mixed, however, with the intestinal fluids, and so continues till the end of the twenty-four hours.

In order to ascertain the absolute quantity of bile discharged into the intestine, and its variations during digestion, the duodenal fluids were drawn off, for fifteen minutes at a time, at various periods after feeding, collected, weighed, and examined separately, as follows: each separate quantity was evaporated to dryness, its dry residue extracted with absolute alcohol, the alcoholic solution precipitated with ether, and the ether-precipitate, regarded as representing the amount of biliary matters present, dried, weighed, and then treated with Pettenkofer's test in order to determine, as nearly as possible, their degree of purity or admixture. The result of these experiments is given in the following table. At the eighteenth hour so small a quantity of fluid was obtained that the amount of its biliary ingredients was not ascertained. It reacted perfectly, however, with Pettenkofer's test, showing that bile was really present.

Time after feeding.	Quantity of fluid in fifteen minutes.	Dry residue of same.	Quantity of biliary matters.	Proportion of biliary matters to dry residue.
Immediately .	640 gra.	33 gra.	10 gra	.30
1 hour .	1,990 "	105 "	4 "	.03
3 hours .	780 "	60 "	4 "	.07
6 hours .	750 "	73 "	3½ "	.05
9 hours .	860 "	78 "	4½ "	.06
12 hours .	325 "	23 "	3½ "	.16
15 hours .	347 "	18 "	4 "	.22
18 hours .	—	—	—	—
21 hours .	384 "	11 "	1 "	.09
24 hours .	163 "	9½ "	4½ "	.34
25 hours .	151 "	5 "	3 "	.60

From this it appears that the bile passes into the intestine in by far the largest quantity immediately after feeding and within the first hour. After that time its discharge remains pretty constant, not varying much from four grains (solid biliary matters) every fifteen minutes, or sixteen grains per hour. (This animal weighed 36½ pounds.)

There is, however, an interval, from about the eighteenth to the twenty-first hour, during which its quantity is much less, and the intestine appears to be in a state of temporary inactivity. But though the absolute quantity of bile remains, with this exception, nearly uniform with the above period, its relative quantity to that of the other ingredients increases pretty constantly after the first hour, owing to the diminishing proportion of the digestive fluids and of the alimentary matters which are undergoing solution.

These facts lead us to the consideration of another question which is of great interest in this connection, viz., *what part, if any, does the bile take in digestion?* We have seen that not only its secretion, but also its discharge into the intestine, are both nearly constant, even after the animal has been many days without food; and consequently that it cannot have, like the gastric and pancreatic juices, an exclusive relation to the digestive process. Still, it is actually present also in the intestine during digestion; and is even discharged into it most abundantly immediately after the introduction of food into the stomach, and before the mixture of gastric juice and half-digested food has begun to pass through the pylorus into the intestine. Is this merely a coincidence, or does it have some definite relation to the changes which the food or the bile or both are to undergo in the alimentary canal? With regard to this question the following facts are of some interest.

The bile precipitates with the gastric juice.

This precipitation can be readily seen in the fluids drawn from the duodenal fistula, half an hour or more after feeding; when the fluids come, as mentioned above, in intermitting starts and gushes, sometimes neutral or alkaline, clear, and brownish, like nearly pure bile, then as a bright, yellowish, turbid mixture, then nearly colorless and acid, consisting mostly of gastric juice with muscular debris. It can also be seen by mixing in a test tube gastric juice from the dog, obtained by means of a gastric fistula, with bile from the gall-bladder of the same animal. If four drops of bile be added in this way to 3j of gastric juice, a precipitate falls which contains

the whole of the coloring matter of the bile; and if the mixture be then filtered, the filtered fluid passes through quite colorless, and is no longer turned green by nitric acid. The gastric juice, notwithstanding this precipitation, retains its acid reaction, but at the same time loses its power of dissolving albuminous substances. For, if gastric juice which has been precipitated in the above manner be filtered, and then kept in a test tube at the temperature of 100° F. with a piece of boiled white of egg, the white of egg becomes somewhat more transparent and brittle and grows contracted and cracked, but the gastric juice exerts little or no dissolving action upon it. This reaction of bile and gastric juice deserves a closer examination, since the two fluids certainly do mix in the intestine, and must exert a more or less important action on each other.

It is the biliary substances themselves which cause the precipitation with gastric juice.

If the crystalline and resinous substances of dog's bile be separated from the other ingredients by the process already several times described, and after precipitation by ether, dissolved in distilled water, they make a clear, colorless solution. Such a solution, made in the proportion of three grain, biliary matters to 3j of water, precipitates with gastric juice like the bile from the gall-bladder; only the precipitate in this instance is colorless. When fresh bile, therefore, is used, the colouring matter is merely entangled and thrown down with some other substance; the precipitate takes place, however, with the biliary matters proper just as well when the coloring matter is absent.

But the biliary substances themselves are precipitated; for if 3j of filtered gastric juice, taken from the stomach six hours after feeding, be precipitated by the addition of four drops, two drops, or even one drop of bile from the gall-bladder, and the turbid mixture filtered, the clear filtered fluid in every instance gives abundant evidence of the presence of biliary matters by Pettenkofer's test. The biliary substances, therefore, or at least by far the greater part of them, remain in solution and do not fall down with the precipitate by gastric juice.

This reaction of the biliary and gastric fluids, though very important in respect to the theory of intestinal digestion, does not appear to have any particular bearing on the subsequent history of the bile itself. It is the gastric juice and the alimentary substances which are affected by coming in contact with the bile, not the biliary ingredients themselves. The effect of this precipitation, however, on the gastric juice and food, even, is not very thoroughly understood. It has been thought by Bernard that the contact of the bile stops altogether the digestive action of the gastric juice, precipitating at the same time all the albuminose which it had previously dissolved; this precipitated albuminose being afterward dissolved by the action of the pancreatic juice, which is regarded by M. Bernard as an exceedingly active agent in intestinal digestion. Some facts which have been mentioned above, seem, indeed, to support this opinion; as, for example, that the gastric juice, when precipitated with bile, loses its power of artificially dissolving boiled white of egg in a test tube. But it very soon becomes evident to the experimenter that these artificial digestions do not always represent exactly the process as it takes place in the living animal. They may be of great service in suggesting and directing subsequent examinations, but can rarely be depended on exclusively as settling any given question. The gastric fluids, taken from the stomach some time after feeding and filtered, often contain

organic matter in solution under a different form from that which it assumes when the digestion is conducted artificially in test tubes. We have found, in point of fact, that bile from the dog's gall bladder always precipitates with the gastric juice as it passes from the stomach into the intestine, whether it be taken from the stomach fifteen minutes, half an hour, or six hours after feeding. The acid fluids drawn from the duodenal fistula, also, three and six hours after feeding, will precipitate with those drawn twenty and twenty-five minutes after feeding, and in which the proportion of biliary matters is larger.

But there are some considerations which militate against the simple view of intestinal digestion entertained by M. Bernard. In the first place the gastric fluids precipitate with the pancreatic juice as with the bile, when mixed in a test tube; while the two intestinal fluids, bile and pancreatic juice, do not precipitate with each other. In the second place, it is a remarkable fact that bile very constantly *finds its way into the stomach, in larger or smaller quantities, at almost all periods of digestion*. This fact has already been noticed by Lehmann, who states (*Physiological Chemistry*, Philad. ed., vol. i. p. 447) that he has "made few examinations of human bodies, or even of recently killed healthy animals, in which he has not discovered biliary constituents in the contents of the stomach lying near the pyloric end." In the pig it is almost universal to find the pyloric portion of the gastric mucous membrane after death permanently stained of a bright yellow by bile. It is very common indeed, furthermore, while drawing off the fluids of the stomach by a gastric fistula within the first fifteen minutes after feeding, to see bile suddenly make its appearance, evidently by regurgitating through the pylorus, when the clear, colourless gastric juice instantly becomes turbid and yellowish. In a few moments the bile may cease to present itself, and the gastric fluids regain their colourless and transparent appearance, to be again, perhaps, rendered turbid and yellow some moments afterward. The gastric fluids, even, which are drawn six hours after feeding, and which are thick, grayish and gruelly in appearance, if filtered clear, will frequently give distinct evidence of the presence of bile by Pettenkofer's test. All this certainly does not essentially interfere with the process of gastric digestion; and the action of the bile on the digested food in the intestine evidently does not correspond exactly with any explanation which has been suggested.

The next series of experiments to which we resorted were undertaken in order to investigate, so far as possible, the following very obscure question, *vis: What becomes of the bile in its passage through the intestine?* The dogs used for these experiments were fed with fresh meat and then killed at various intervals after the meals, the abdomen opened, ligatures placed upon the intestines at different points, and the contents of their upper, middle and lower portions collected and examined separately. The results thus obtained show that, under ordinary circumstances, the bile, which is quite abundant in the duodenum and upper part of the small intestine, diminishes in quantity from above downward, and is not to be found in the large intestine. The entire quantity of the intestinal contents diminishes and their consistency increases as we approach the ileo-cæcal valve. At the same time their colour changes from a light yellow to a dark bronze, or blackish green, which is always strongly pronounced in the last quarter of the small intes-

tine. The following experiment will serve to show the plan which was followed and its results.

Experiment.—A full-grown, healthy bitch, was fed with fresh meat, then kept entirely without food, but supplied only with water, for five days. At the end of that time she was killed by section of the medulla.

The stomach contained flæzæ of a nearly colorless, dingy, frothy, neutral fluid.

Upper half of small intestine contained 117 grains of a dull yellow, gelatinous, semi-fluid, neutral matter. Its dry residue was 24 grains.

Lower half of small intestine contained 130 grains of a much darker bronze-colored neutral gelatinous mass, a large proportion of which consisted of hairs and intestinal worms, which were not present in the contents of upper half. Dry residue 20 grains.

Large intestine contained 210 grains of a dark, olive-brown, consistent mass, slightly acid in reaction. Dry residue 73 grains.

All three lots were then evaporated to dryness, and afterward exhausted by repeated extraction with absolute alcohol, until the filtered alcohol came through perfectly colorless, and no longer gave any turbidity with ether. The alcoholic solutions were then reduced by evaporation to the same volume and precipitated with ether in excess. The ether-precipitate was separated, dried under the air-pump, and weighed. The results obtained in this way are given in the two following tables:

TABLE 1.

	Weight of fresh contents.	Dry residue of same.	Ether-pre- cipitate.	Proportion of ether precip. to fresh contents.
Upper half of small intestine	117 grains.	24 grains.	5 grains.	.0427
Lower " "	130 "	20 "	5 "	.0384
Large intestine	210 "	73 "	3 "	.0142

TABLE 2.

	Weight of solid residue.	Ether-pre- cipitate.	Prop'n of ether-precip. to solid residue.
Entire small intestine . .	44 grains.	10 grains.	.227
Large intestine	73 "	3 "	.041

The ether-precipitate of the alcoholic solution is, therefore, both positively and relatively very much less in the large intestine than in the small. Its proportion to the entire solid contents is only one-fifth or one-sixth as great in the large as it is in the small intestine. But even this small quantity does not consist of biliary matters; for the dried ether precipitates, in the above experiment, when dissolved in distilled water all three precipitated by subacetate of lead; but that from the large intestine very much the least. The watery solutions being treated with sugar and sulphuric acid, those from both portions of the small intestine gave Pettenkofer's reaction promptly and perfectly in less than a minute and a half; while in that from the large intestine no red or purple color was produced even at the end of three hours, but only a dingy, muddy brown.

The small intestine, consequently, contains at all times substances

giving all the reactions of the biliary ingredients; while in the contents of the large intestine no such substances can be recognized by Pettenkofer's test.

The biliary matters, therefore, disappear in their passage through the intestine. This disappearance must be explained in two different ways. First, the biliary matters may be actually reabsorbed from the intestine, and taken up by the bloodvessels; or second, they may become so altered and decomposed by the intestinal fluids as to lose the power of giving Pettenkofer's reaction with sugar and sulphuric acid, and pass off with the feces in an insoluble form. The first of these explanations is that which has recently been regarded with the 'most favor; and it is, in fact, rendered extremely probable by the experiments of Bidder and Schmidt, already referred to, in which they found that the entire quantity of sulphur contained in the feces of the dog during five days was very much less than that which must have been discharged with the bile into the intestine during the same time. It is almost impossible to avoid the conclusion that it has been reabsorbed by the bloodvessels. Still this gives us no idea how far the bile is altered before its reabsorption; and the direct and absolute proof, also, of finding the biliary matters in the blood of the portal vein is still wanting. We have endeavored to supply the latter deficiency by examining the portal blood in dogs, killed at various times after feeding. The animals were killed by section of the medulla oblongata, a ligature immediately placed on the portal vein; while the circulation was still active, and the requisite quantity of blood collected. This blood was sometimes immediately evaporated to dryness by the water bath. Sometimes it was coagulated by boiling in a porcelain capsule over a spirit lamp, with water and an excess of sulphate of soda, and the filtered watery solution afterward examined. But most frequently, the blood, after being collected from the vein, was coagulated by the gradual addition of three times its volume of alcohol at ninety-five per cent., stirring the mixture constantly, so as to make the coagulation gradual and uniform. It was then filtered, the moist mass remaining on the filter subjected to strong pressure in a linen bag by a porcelain press, and the fluid thus obtained added to that previously filtered. The entire spiritous solution was then evaporated to dryness, the dry residue extracted with absolute alcohol, and the alcoholic solution treated as usual to discover the presence of biliary matters. In every instance blood was taken at the same time from the jugulars or the abdominal vena cava, and treated in the same way for the purpose of comparison. We have examined the blood in this way one, four, six, nine, eleven and a half, twelve and twenty-four hours after feeding. As the result of these examinations it was found that in the venous blood, both of the portal vein and of the general circulation, there exists a substance soluble in water and absolute alcohol, and precipitable by ether from its alcoholic solution. This substance is often considerably more abundant in the portal blood than in that from the general system. It adheres closely to the sides of the glass after precipitation, so that it is always difficult and often impossible to obtain enough of it mixed with ether for microscopic examination. It dissolves also, like the biliary substances, with great readiness in water; but in no instance have we ever been able to obtain from it such a satisfactory reaction of Pettenkofer's test, as would indicate the presence of bile. This is not because the reaction is masked, as might be suspected, by some of the other in-

gredients of the blood; for if at the same time two drops of bile be added to half an ounce of blood taken from the abdominal vena cava, and the two specimens treated alike, the ether precipitate may be considerably more abundant in the case of the portal blood will give no such reaction. Notwithstanding, then, the strong probability that the biliary matters are taken up by the portal blood, we have failed to recognize them there by Pettenkofer's test.

From the facts, therefore, which have been detailed above, we may derive the following conclusions:

I. The two biliary substances, crystalline and resinous, are not the same in different species of animals, though they resemble each other in most of their chemical properties.

II. In all cases, they act in the same way with Pettenkofer's test, whether both or only one of them be present.

III. In different kinds of bile, the biliary matters are to be distinguished from each other principally by their reaction with the salts of lead.

IV. In human bile there is no crystallizable biliary substance, but only a resinous one. The same thing is the case with the bile of the pig.

V. Pettenkofer's reaction is the only available test for the biliary substances proper. It may fail to detect them when present in very small quantity; but, if used with care, will not lead us to mistake other substances for them.

VI. The bile in the carnivorous animals passes into the intestine for at least twelve days after the last meal.

VII. It is discharged into the intestine most abundantly immediately after feeding; during the remainder of the twenty-four hours its flow is about uniform (sixteen grains biliary matters per hour in a medium sized dog), except from about the eighteenth to the twenty-first hour, during which time it is much less.

VIII. When the bile comes in contact with the gastric fluids, the organic matters of the latter are precipitated; but the biliary substances remain in solution.

IX. The biliary substances disappear during their passage through the intestine, so that they can no longer be recognized by Pettenkofer's test.

X. They are, in all probability, reabsorbed into the blood; but if so, they first undergo in the intestine such changes, that they no longer give Pettenkofer's reaction with sugar and sulphuric acid.

Gonorrhœa.—Mr. Dallas of Odessa (Med. Chir. Rev. July, 1856) confirms the statements of Taddei, Marchal and others, that copaiba injections afford the most efficacious treatment of gonorrhœa. He reports sixteen cases cured, without internal remedies, by repeated injections of the following mixture: Copaibæ, drach. 5; vitell. ovi unius; ext. opii, gr. j; aquæ, oz. vij. Dr. Henry Hancox (Lancet, August 1856) pronounces buchu as effectual as copaiba in the treatment of gonorrhœa.

EDITORIAL DEPARTMENT.

Dalton, on the Constitution and Physiology of Bile.—A careful perusal of the paper which occupies the bulk of our Eclectic Department will convince our readers that it could be occupied by no more interesting matter. Dr. Dalton's name as Prof. of Physiology, etc., in the Buffalo University, is sufficiently well known to all, and the reputation which he has acquired since his connexion with that institution, will be materially increased by this paper, which is the result of two years' constant investigation. We make this allusion because elaborate papers on subjects not immediately practical are apt to be passed over as too abstruse for ordinary readers. The paper by Dr. Dalton requires, and we hope it will receive a careful study. We had hoped to obtain the woodcuts by which it was illustrated in the American Journal, but were unable to do so; they would of course have added to the interest of the article though they are by no means indispensable. r.

A Collection of Remarkable Cases in Surgery. By PAUL F. EVE, M. D., Professor of Surgery in the Medical Department of the University of Nashville.

Any one who should suppose that he has had remarkable cases in surgery, should glance at some of the cases cited in the work now before us, amputation of a supernumerary head, swallowing open jack-knives, pairs of suspenders, silk handkerchiefs, etc., etc. All the journals, abstracts, reviews, text-books and note-books have been diligently ransacked by Prof. Eve, for remarkable cases, until he has now a volume of eight hundred and fifty pages filled with marvel upon marvel. In the preface the author distinctly

defines what he has done, claiming no more credit than is justly his due, namely, the credit of collecting in a substantial form, the records of such remarkable cases as would, perhaps, pass away, and at all events would be available to very few members of the profession. In his own words, "The volume now offered to the profession contains little else than a collection of remarkable cases in surgery. This is about all it professes to be. And believing that uncommon events and strange circumstances can best be described by those who have observed them, the language of the writer has generally been adopted, with full credit to the source whence derived. The collector has been studious to do injustice to no one. He has taken the liberty occasionally to abbreviate articles; in some instances to give them a mark striking and appropriate title; and now and then to add a few brief comments." Again: "In a work where we have found so much said for us, the labor has been light; and the only merit, if there be any at all, is in the selection of matter; of this the profession must judge."

The author has arranged the cases under appropriate heads, so that cases of injury or disease affecting any particular part of the body, may be easily found. He devotes chapters to the head, spinal column, face, neck, chest, abdomen, pelvis, genito-urinary organs, extremities, and one to miscellaneous cases. By this arrangement one is enabled to find readily any particular case, if it be in the book. This will be especially useful to teachers of surgery who should wish to quote any illustrative case which they might not be able to find elsewhere. We may congratulate ourselves that the labor of collecting and arranging these cases has been performed by one whose experience and judgment render him so competent to the task.

This work is published by J. B. Lippincott & Co., of Philadelphia, and for sale by Phinney & Co. The typography is excellent, but the few wood cuts, though they may serve to illustrate, certainly do not beautify the book.

F.

Lesions of the Epiglottic Cartilage. By HORACE GREEN, M. D., LL.D., etc.

We lately read with pleasure, the paper which is now before us, in the American Medical Monthly for October. The pathology and treatment of the diseases affecting the epiglottis, with some interesting physiological deductions, are here considered. The principal lesions are:

- 1st. Erosions or abrasions of its mucous surface.
- 2d. Ulceration of the membrane and of its glands.

3d. Oedema or infiltration of its areolar tissue.

These lesions, their diagnosis and treatment, are treated of at length. The means of diagnosis are extremely simple, being merely to bring into view the epiglottis, by forcibly depressing the tongue, when we can easily detect the nature of the difficulty if it be seated in this part. The Dr. then applies his favorite arg. nit. and every thing goes well. The cases related have all been accompanied by a teasing continuous cough, which has been referred to the lungs, larynx, or trachea, but which inspection shows to be dependent on a little insignificant abrasion or ulceration of the mucous membrane covering the epiglottis, which is speedily remedied by a few applications of nitrate of silver in stick or solution. Dr. Green, among other cases, gives one which was treated by the celebrated Hahnemann; after a long trial of the infinitesimal doses without effect, though the patient was assured of success, Hahnemann advised his patient to contract syphilis and wait for the secondary effects, which he said would eradicate his present disorder! This is curing one disease by substituting another, with a vengeance, and if the patient were compelled to cure his syphilis by producing the mercurial disease, he would wish himself in good old fashioned hands from the beginning. The patient came under Dr. Green's care, who cured him by topical applications.

Several cases are related of persons who have lost the greater part, or the whole of the epiglottis without experiencing any serious difficulty in swallowing, or in speaking, showing that the epiglottis is not so essential to the protection of the windpipe, as was formerly supposed. This has long since been demonstrated in this country as well as in Europe, by excising the epiglottis of dogs; but it is seldom that we see cases in the human subject illustrative of this fact.

Dr. Green in one case saw distinctly the movements of the glottis, which sufficiently demonstrates to any one the possibility of passing an instrument through the chink, which is still denied by some. We have never seen this in the human subject, but if it be anything like the movements in the dog, there can be no difficulty in introducing a large sized instrument if we seize our opportunity. We have no kind of doubt that it is done every day and can be done by any one.

Very little is said in text-books and in the lecture room, about lesions of the epiglottic cartilage, and the deficiency has been ably supplied by Dr. Green.

R.

Apologetical.—We owe our indulgent readers an apology for seeming negligence in the issue of the Journal for the past two months. The State Fair unfortunately happened at the time when our October number should have been issued, and though every effort on our part was used, it was impossible to be in with the first of the month; thinking to appease our subscribers by an exceedingly prompt issue in November, we prepared the copy very far in advance. Another and more serious source of difficulty was a general strike of the printers throughout the city, leaving upon the ground only one faithful and most competent hand, who has "set" on it like a persistent and motherly hen for the last dozen years. We shall be all right hereafter, in fact are already so, so far as our publishing arrangements are concerned.

F.

Editorial Changes.—We notice the name of Prof. Fenner on the cover of the New Orleans Medical News and Hospital Gazette, as assistant editor; Drs. Choppin and Beard having retired. In his salutatory, Dr. Fenner draws rather a discouraging picture of medical editorship, as far as remuneration is concerned. After four years assiduous labor in support of the New Orleans Medical and Surgical Journal, he received the amount of *one hundred and twenty-five dollars*. In spite of this discouraging fact, Dr. Fenner has again donned the "editorial harness," and we cordially welcome him back to a field from which he has reaped fame if not dollars and cents.

F.

To our Subscribers.—We are compelled to close this number with a dun, but of no ordinary character. We are fully sensible of the hard times and the difficulty of paying anything, but we must ask every delinquent subscriber for the small sum of our subscription; we would not ask for two hundred dollars, for we would be certain not to get it, but the small sums which are due to us from so many, could certainly be paid without great inconvenience. Send us money of any description which is current where it comes from, at our risk.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

DECEMBER, 1857.

NO. 7.

ORIGINAL COMMUNICATIONS.

**ART. I.—*Fractures of the Inferior Maxilla.* By FRANK HASTINGS
HAMILTON, M. D.**

Division. Of nineteen examples of fracture of this bone which have come under my observation, eighteen were broken through some portion of the body, namely, one perpendicularly through the symphysis; one through the symphysis and through the center of the body at the same time; one through the angle and center of the body; one through the body and ascending ramus; one through the angle and center of the body upon one side, and through the center of the body upon the opposite side; four through the angle only, and ten through the body only.

Of the whole number, eight were broken completely asunder at two or more points, constituting double and triple fractures; and of the remaining eleven, three were accompanied with detachments of portions of the alveola, and one with the detachment of a considerable fragment from the base.

From this analysis it will be seen that eleven of the nineteen, or more than one-half, were comminuted fractures. Seven were compound; not to

include in this enumeration several examples in which the partial or complete dislodgment of a tooth, might entitle them to be called compound.

The two fractures through the symphysis were vertical, and eight of the remainder were known to be oblique. Malgaigne has remarked, also, that in fractures of the body of the bone the direction of the obliquity is generally such that the anterior fragment is made at the expense of the internal face of the bone, and the posterior fragment at the expense of the external face: this latter overriding the former. Buck, of New York, has seen the fragments in an opposite condition, requiring the use of the knife and the saw for their extrication.*

In thirteen examples of fractures through the body, not including fractures at the symphysis, the line of fracture has been observed to be eight times at or very near the mental foramen; twice between the first and second incisor; twice just behind the last molar, and once between the two last molars.

Syme, Liston, and Miller, have remarked, also, the greater frequency of fracture near this foramen, but Mr. Erichsen thinks he has seen it most frequently broken near the symphysis, between the lateral incisors, or between these teeth and the canine. Boyer observes that it is generally somewhat in front of the foramen; for which reason, as he thinks, the dental nerve is rarely torn.

Says Boyer, in his *Traité des Maladies Chirurgicales*, "A fracture never takes place in the central point of the length of the jaw, called the symphysis of the chin; but when the solution of continuity occurs towards the middle of the bone, it is upon one or the other side of the symphysis, which remains always upon one of the fragments." An opinion which, however, he does not seem always to have entertained, since Richerand, in a report of his lectures has made him say that a fracture sometimes takes place "near the chin, but seldom so as to produce the division of the symphysis of that part, though it be not impossible." But many surgeons since his time, have noticed this fracture, and Malgaigne assures us that J. Cloquet has demonstrated its existence upon an anatomical specimen. In the two following cases the evidences were so complete that I do not myself entertain much doubt as to their character:

* New York Jour. Med., March, 1847. Proceedings of N. Y. Med. and Surg. Soc., Sept. 19, 1846.

An Irish laborer, aged 17 years, was thrown from a wagon, breaking the inferior maxilla on both sides through the body, and, also, exactly in the center, vertically, between the central incisors.

I dressed the jaw with a four-tailed bandage, but found great difficulty in bringing up the left fragment to a line with the right. I therefore closed the jaws; but finding that the left side still fell three lines below the right, I placed a pine wood wedge between the teeth on the right side, and drew the inferior maxilla up firmly. It now lacked only about half a line of being in place.

There did not appear to be, after this, much difficulty in maintaining quiet and apposition of the fragments; and I supposed, from repeated examinations, that they were in exact line, until four weeks after the fracture had occurred, when I discovered that the central fragments were lifted about two lines above the lateral, and, also, slightly carried back; and although union had not taken place, yet they could not be replaced by any moderate force. The bones united with this slight deformity. Four days later no motion was perceptible, and the displacement seemed to be rather less. From this time the dressings were discontinued.

A gentleman, aged twenty-five years, had his inferior maxilla broken by the kick of a horse. The left lateral incisor was completely displaced, and a large piece of the alveola detached.

Dr. S. G. Ellis, of Gowanda, N. Y., dressed the fracture, securing the loosened fragment by the main-spring of a watch, made fast to the teeth by a silver wire, and closing the mouth completely, without any interdental splint. Upon the outside he placed a pasteboard splint and bandages. On the fourth week a fragment exfoliated, and came out under the chin. The union was delayed some six or eight weeks.

I examined the jaw ten years after it was broken, and found the line of a vertical fracture exactly through the symphysis menti. The left half of the chin was slightly elevated, and the whole of that side of the shaft was smaller than the right. He could not close his teeth perfectly, yet he could close them sufficiently for the purposes of mastication.

Stephen Smith, of New York, has seen two examples,* Lonsdale mentions three,† and Gibson has seen one.‡

* New York Jour. Med., Jan., 1857, Hospital Reports.

† Practical Treatise on Fractures. By Edward F. Lonsdale. London: 1838, p 226.

‡ Institutes and Practice of Surg. By Wm. Gibson. Philadelphia: 1841, p. 261.

One ought not to be too confident, however, of the exact line of the fracture unless its existence can be demonstrated upon the naked bone, since a slight deviation to the one side or the other of the symphysis might not be easily detected in the living subject.

Velpeau, Fergusson, Gibson, Henry Smith and others, have remarked that a separation at the symphysis takes place usually in infancy or childhood. But in the seven examples whose ages I find reported, only one, a case mentioned by Lonsdale, occurred in a person as young as ten years; in one, of the cases seen by myself the patient was seventeen years old, and the remainder have ranged from twenty-five years to sixty: and the average ages of all is thirty-two years.

I have seen one example of a fracture of the ramus, in a man twenty-three years old, who had been struck by a wooden block on the side of his face. The ramus was broken just above the angle, and the body was broken, also, obliquely near the symphysis. The intercepted fragment was carried inwards.* Ledran mentions the case of a child, ten or twelve years old, in whom the fracture was double also; one fracture having taken place through the body, and one extending obliquely from the root of the coronoid process to the neck of the condyle. The intercepted fragment was, however, so little displaced that the fracture of the ramus was not discovered until after death.† Malgaigne refers to this as the only example recorded; but Stephen Smith, of the Bellevue Hospital, has met with it four times, in one of which the ramus was broken on both sides; in two cases one ramus only was broken; and in one the body was broken on the right side and the ramus on the left.‡

In two of these examples the fragments were not displaced.

The coronoid process is so well protected by muscles and by the surrounding bony projections, that it is very rarely broken.

Houzelot mentions a case in which a fall from a height produced at the same time a fracture of both condyles, of both coronoid processes and of the symphysis.§

With this single exception, I am not able to find a recorded example of a fracture of this process.

At least eight cases have been reported of fracture of the condyles, in all

* Trans. Amer. Med. Assoc. Report on "Deformities after Fractures," vol. viii., p. 385, case 17.

† Malgaigne, op. cit., p. 377, from Ledran, *Observ. Chirurg.* tom. 1, obs. viii.

‡ New York Jour. Med., Jan., 1857. Bellevue Hosp. Reports.

§ Malgaigne, op. cit., p. 400.

of which the separation occurred through the neck, viz., three by Ribes, two by Desault, one by Bérard, one by Houzelot, and one by Bichat. The fracture always occurring through the neck and just below the insertion of the external pterygoid muscle.

According to Malgaigne, the analysis of these cases shows two classes of examples: the one occasioned by falls or blows upon the chin, and producing a simple fracture of the neck of the condyle; the other, occasioned by injuries inflicted upon the side of the face, and producing a fracture of the neck on the side corresponding to that upon which the injuries are received, and at the same time a fracture of the body upon the opposite side. These two varieties seem to be about equally common.

In the case mentioned by Houzelot, and already cited, there existed at the same moment, a fracture of both condyles, of both coronoid processes and at the symphysis. Watson saw a man in the New York Hospital, who, three weeks before, had fallen from the yard-arm of a vessel, breaking his thigh and arm bones and also both condyles of the lower jaw. "His face was somewhat deformed by the retraction of the chin; the mouth could not be opened so as to protrude the tongue to any great extent beyond the teeth, and the teeth of the upper and lower jaw could not be brought into contact. In attempting to move the jaw the patient experienced pain and crepitation just in front of the ears; the crepitation could easily be felt by placing the fingers over the fractured condyles. Nothing was done for the fractures of the jaw. In a few weeks the rubbing of the broken surfaces and attendant soreness ceased to trouble him; but the shape of the jaw and difficulty of opening the mouth, to any great extent, still remained unaltered."*

Etiology. The causes, in such cases as I have myself investigated, seem generally, if not always, to have been direct blows, in most instances inflicted by a club, or by the kick of a horse; in one instance the blow was inflicted by the fist. In ten of eleven cases mentioned by Stephen Smith, the causes were direct blows. Examples of fracture of the inferior maxilla from indirect blows have, however, been mentioned by other surgeons, the angles of the bone being pressed together by the passage of a wheel, and the fracture taking place usually toward the symphysis.

We have already alluded to the observation of Malgaigne, that fractures of the condyles belong to two classes: the one being occasioned by falls upon the chin, and the other by blows upon the side of the face: the former acting as a counter force and the latter as a direct.

* New York Jour. of Med., Oct., 1840. Hospital Reports.

The coronoid process can only be broken by a direct blow.

Symptoms. Fractures of the body of the bone are characterized by the usual signs of fracture elsewhere, namely, displacement, mobility, crepitus, and pain.

The displacement is generally present; but its direction and amount vary according to the situation and course of the fracture, and also according to the violence and direction of the force producing the fracture.

I have never seen a case unaccompanied with some degree of displacement; Ledran and other surgeons, have seen such examples, where neither the periosteum nor mucous membrane have been torn.

Generally, in fractures of the body, the anterior fragment is depressed; and Malgaigne affirms that where an overlapping occurs, the anterior fragment lies, generally, within the posterior; a fact which he explains by the direction which the line of fracture usually takes, namely, from without, inwards and backwards, as we have already mentioned. In one instance, reported by me to the Amer. Med. Assoc., where the jaw was broken at the symphysis and also on both sides through the body, the central fragments were found, after about four weeks, lifted two lines above the lateral fragments, and also slightly carried backwards.* I have twice also met with examples in which the posterior fragments were inclined to fall inwards towards the mouth, a circumstance which seemed to indicate that the course of the obliquity was in a direction opposite to that which Malgaigne has observed to be most frequent. In each of these examples the jaw was broken upon both sides, by blows inflicted with a club, and the fractures were situated well back.† It is possible, however, that the position of the fragments was due rather to the direction and force of the impression than to the direction of the line of fracture.

As to the action of the muscles in the production of displacement, Boyer, S. Cooper, Erichsen and Malgaigne have observed that their action upon the anterior fragment is greater in proportion as the fracture is nearer the symphysis, and less in proportion as it approaches the angle. So that in the former case the attempt to close the mouth is sometimes attended with a depression of the anterior fragment, causing a separation of the fragments at their alveolar margins; while in the latter case, the attempt to close the mouth forcibly is occasionally attended with separation of the fragments along the line of the base.

* Trans. Amer. Med. Assoc., vol. viii., p. 380, 1855, case 6.

† Ibid, cases 1 and 10.

While I am not prepared to deny the accuracy of these observations, it is proper to notice that Liston finds the greatest displacement when the fracture is opposite the first molar, and I must confess that the fact as stated by Boyer and others, does not seem to admit of a satisfactory explanation; since the number, and consequently the power of those muscles which act upon the anterior fragment from below, is greatest at a point considerably remote from the symphysis. These muscles, namely, the digastricus, the genio-hyo-glossus, and the mylo-hoideus, with several other muscles which act less directly, all tend to depress the anterior fragment, and in some slight degree to carry it backwards, a direction which indeed it usually takes, and which it would probably always take if left alone to the action of the muscles. If the fracture has occurred through the angle, or at any point within the attachments of the masseter muscle, the action of those fibres which remain connected with the anterior fragment will sufficiently explain the fact that it is not now so easily depressed below the level of the posterior fragment: while the separation of the fragments along the line of the base when an attempt is made to close the jaw forcibly, is probably due to the loosening and partial dislodgment of some of the molars, which being pressed upwards act as a pivot upon which the fragments are made to bend.

Boyer affirms, also, that "the fractured portions are never deranged so as that one passes on the other, or in the direction of their length; for the action of none of the muscles of the lower jaw is parallel to the axis of that bone; besides, its extremities are retained in the glenoidal cavities of the temporal bones." But this theory is too exclusive, since the fragments may have become displaced in any direction independently of the muscular action. Moreover, the action of the muscles attached to the anterior fragment, although not parallel to the axis of the bone, does somewhat favor a displacement in this direction; and the action of the pterygoid muscles upon the posterior fragment still farther favors this form of displacement.

An overlapping of the fragments in the direction of the axis is, no doubt, exceptional, and in such examples as I have seen it, was very trivial. It occurred in the case marked III, in my report on Deformities after Fractures, the fracture being near the mental foramen; and in case II, the fracture being just anterior to the last molar; and also in case VI, where the bone had been broken through the center of the body on both sides and through the symphysis; but in neither case did the overlapping exceed two or three lines, and it was always easily overcome.

The mobility of the fragments is not so striking in these accidents as in

fractures of the long bones, yet it is generally sufficiently marked, and especially where the bone is broken upon both sides at the same time. If only one side is broken, both motion and crepitus will be most easily detected by lateral pressure upon the posterior fragment, which being the smallest and the least supported by antagonizing muscles, will be found to be the most movable. If the fracture is upon both sides, mobility and crepitus will be most readily developed by seizing upon the anterior fragment and moving it gently up and down, while the finger rests upon the alveola within the mouth.

Sometimes a slight swelling or tenderness at some point of the alveola, or the loosening or complete dislodgment of a tooth, will indicate the point of fracture.

Pain, especially when the fragments are moved, is here more constant than in most other fractures, owing, perhaps, in part to the superficial position of the bone which renders the soft parts lying over it more liable to injury from the causes of fracture; but, also, in part to the lesions which the infra-maxillary nerve may have suffered. It is, indeed, a matter of surprise that injury to this nerve does not oftener seriously complicate these accidents, considering, as it does, through so large a portion of the angle and body of the bone. One might naturally suppose that its complete disruption would often occasion paralysis of those portions of the face to which it is finally distributed, and that its partial lesions and contusions would create, in many cases, the most acute and constant suffering. It is rare, however, that we have present an amount of pain which might not be attributed to a severe shock, or a slight strain upon its fibres. I have myself never seen any extraordinary suffering distinctly attributable to an injury of the dental nerve after fracture, nor any degree of facial paralysis. Rossi relates a case in which convulsions followed this accident, and in which, as a final remedy, he proposed to expose and bisect the nerve; and Flajani saw a patient whose jaw had been broken, die in convulsions on the tenth day, the muscular contractions having commenced as early as the fourth day after the accident. The autopsy disclosed a rupture of the dental nerve, but no injury to the brain.

These two examples are, as far as I know, all which our records supply, in which grave results have been attributed to lesions of this nerve; and even here some doubt must remain whether the symptoms were not quite as much due to the immediate injury done to the brain as to the nerve.

Boyer explained the infrequency of severe injury to the dental nerve by the supposition that the "greater part of these fractures take place between the symphysis and the foramen by which this nerve comes out." An opin-

ion which may be correct, but needs confirmation. I have seen the body or angle broken at points posterior to the mental foramen, and where the nerve lies within its bony canal, ten times, and in front of the mental foramen six times, and twelve times the point of fracture has not been stated with such accuracy as to enable me to say whether it was in front of or behind the foramen; of these latter, eight were said to be near the foramen. It may be fair to presume that at least one quarter of these eight were posterior, and this will leave just twelve as occurring where the nerve is within the canal, and an equal number at points without the canal.

I suspect that a better explanation may be found in the fact that the fragments seldom overlap, to any appreciable extent, and that even the displacement in the direction of the diameters of the bone is generally inconsiderable, or if it does exist it is easily and promptly replaced.

If the displacement is sufficient to occasion a complete disruption of the nerve, some degree of temporary paralysis in the portions of the face supplied by it must be inevitable; and, perhaps, this occurs oftener than it has been noticed, since during the confinement of the jaw by dressings, it is not likely to be observed, and after the lapse of a few weeks it will probably cease altogether.

Boyer remarks that when it is torn "the square and triangular muscles of the chin are paralyzed. The skin of that part and the internal membrane of the under lip preserve their sensibility, which it appears they owe to some threads of the portio dura of the seventh pair; but the paralysis of these muscles does not prove of itself that the jaw is fractured." Boyer has, however, noticed this result but once, and then in a case where the bone was broken upon both sides and the soft parts greatly contused. The triangular and square muscles were paralyzed, in consequence of which there was a slight contortion of the mouth. A. Bérard has also mentioned a case of vertical fracture occurring between the second and third molars, without displacement, which was accompanied with complete insensibility of the lip on this side throughout the space comprised between the commissure and the median line, and between the free border of the lip and the chin. The paralysis disappeared after a few days.*

To these signs now enumerated, we may add as occasional complications, rather than as diagnostic symptoms, salivation, swelling of the submaxillary and sublingual glands, abscesses, necrosis, &c. If the blow has been vertical upon the chin, and the direction of its force has been towards the articu-

* Malgaigne, from Gazette des Hôpitaux, 10 août 1841.

lations, the bony structure of the ear, and even the brain may have suffered serious lesions, which may be indicated by a deafness, or a roaring in the ears, by bleeding from the external meatus, and by fatal coma. Tessier saw a man who had received the kick of a horse exactly upon the center of the chin, breaking the bone on both sides, and who, in consequence, bled freely from his ears;* and Alix relates the case of a young man who, falling from a height and striking upon his chin, had broken his jaw. Insensibility immediately followed; convulsions also ensued upon the fourth day, and he died upon the sixth.†

If the fracture is at the symphysis, it is generally vertical, and either fragment may be found slightly displaced upwards or downwards. In one of the examples seen by myself, the left fragment fell three lines below the right, and in the other the right side had fallen about one line. In a case mentioned by Symes there was scarcely any displacement.‡ Liston remarks that it is usually slight. Erichsen and B. Cooper, have observed the same.

The signs which indicate a fracture through the angle have already been sufficiently considered when speaking of fractures of the body; from which they only differ in the less degree of displacement, and in the fact that the posterior fragments are a little more prone to fall inwards towards the mouth. I have noticed, also, that owing probably to the loosening and partial dislodgment of the last molar, it is sometimes difficult to close the mouth, the same as in fractures a little farther forward.

In the only example of fracture of the ascending ramus which I have seen, the bone being broken also through its body, the fracture of the ramus was easily recognized by both crepitus and mobility.

As to the signs which indicate a fracture of the coronoid process, I am only able to infer them from its anatomical relations. There must be some embarrassment in the motions of the jaw, occasioned by the detachment of a portion of the fibres of the temporal muscle; and it is probable that an examination by the finger, within the mouth, would readily detect mobility and displacement.

A fracture through the neck of the condyle is characterized by pain at the seat of fracture, especially recognized when an attempt is made to open or shut the mouth, by embarrassment in the motions of the jaw, by crepitus,

* Malgaigne, p. 383 and 386; from *Jour de Méd.*, 1789, tom. 79, p. 246.

† Malgaigne, p. 386; from Alix, *Observata Chir.*, fascic. 1, obs. 10.

‡ *Amer. Jour. Med. Sci.*, vol. xviii, p. 243.

which may usually be felt or heard by the patient himself, by mobility and displacement.

The upper fragment, if disengaged from the lower, is drawn forwards, upwards and inwards by the action of the pterygoideus externus; and it is felt not to accompany the movements of the lower fragment.

The lower fragment is at the same time drawn upwards, in consequence of which the lower part of the face is distorted: a circumstance first noticed by Ribes, and which supplies an important diagnostic mark between a fracture of one condyle and a dislocation. In dislocation the chin is commonly thrown to one side, but it is to the side opposite that on which the dislocation has occurred, while in fracture the chin is drawn to the same side.

Prognosis. Physick, of Philadelphia, saw a case of non-union of the body of this bone, which had existed nine months.* Dupuytren mentions a case which had existed three years.† Horeau has recorded one example in a man who had received a gunshot wound through his face;‡ and Stephen Smith, of New York, reports a case of fracture of both the body and ramus, in a man 45 years old. The severity of the injury with the supervention of delirium tremens, prevented the application of dressings until the thirteenth day. On the twentieth day about a pint of blood was lost by hæmorrhage from the seat of fracture. He remained in the hospital one hundred and thirty-seven days, and was finally discharged, the fragments not having yet united.§ Malgaigne says that Boyer has seen several examples, but I know of no other cases which have been recorded. In no instance under my observation, has the bone refused finally to unite, although I have seen the union delayed six, seven, ten, and even eleven weeks or more.|| In three of these cases the fractures were either compound or comminuted; but in the case last mentioned, the fracture was simple, the delay in the union being due to a feeble condition of the system, and in part, perhaps, to neglect of proper treatment.

The infrequency of nonunion after this fracture, is a fact worthy of especial attention, because of the extreme difficulty, if not actual impossibility, in many cases, of preventing motion between the fragments, by any mode

* Phila. Med. & Surg. Jour., vol. v.

† Leçons orales.

‡ Malgaigne, from Jour. de Med., par Corvisart, etc., tom. x, p. 195.

§ Smith, New York Jour. of Med. & Surg., Jan., 1857.

|| My Report on Deformities after Frac., Cases 2, 14, 15, 18.

of dressing yet devised. Any one who has observed attentively, must have seen, not only that his dressings are more often found disturbed and loosened, than in the case of almost any other fracture, unless it be the clavicle, and thus the fragments have been through all the treatment subjected to frequent changes of position; but, also, that even while the dressings remain snugly in place, the patient seldom is able to perform the necessary acts of deglutition, or to speak, even, without inflicting some motion upon the fragments.

Indeed, the rapidity as well as certainty with which this bone unites, has, I think, been observed by other surgeons, and I have myself noticed one instance, in an adult person, in which the bone was immovable at the seat of fracture, on the seventeenth day, and, perhaps, earlier. In other instances, the union has been speedily effected after the removal of all dressings.

It would be very unsafe from these few cases, to deduce any conclusions as to the effect of slight motion in retarding the union of broken bones. Yet I shall take the liberty of referring to some remarks upon this subject, published by myself, in this Journal, vol. x, p. 142, in connection with an article entitled "New Mode of Treating Ununited Fractures of the Humerus."

The amount of deformity resulting, also, from these fractures is usually very trifling, whatever treatment has been adopted. Seven of the nineteen examples seen by me, are recorded as resulting in some degree of imperfection, but one of these cases was complicated with other injuries of which the patient died in a few days, and one was a case of delayed union. Only five of the united fractures are imperfect, and in none of these is the imperfection such as to be noticed in a casual examination of the face. The deformity which is usually found, is a slight irregularity of the teeth, produced, in most cases, by a falling of the anterior fragment, and in one case by a slight elevation of the anterior fragment. But even this does not always interfere with mastication, and would often pass unnoticed by the patient himself. It is probable, too, that time, and the constant use of the lower jaw in mastication, will gradually effect a marked improvement in the ability to bring the opposing teeth into contact. I think I have observed this in several instances.

Chelius remarks that in "double or oblique fractures it is very difficult to keep the broken ends in their proper place; deformity and displacement of the natural position of the teeth commonly remains."

In the second example of fracture through the symphysis mentioned by me, the left fragment remained slightly elevated, and he could not close his teeth perfectly, yet he could close them sufficiently for the purposes of mas-

tication. It is probable, however, that ordinarily no difficulty will be experienced in accomplishing a perfect cure when the separation has taken place only at the symphysis.

In fractures of the condyles more care is requisite to retain the fragments in apposition, and sometimes it may be found to be impossible. Richerand mentions the case of a man who having been three months in the Hospital De la Charité, for a double fracture of the lower jaw, one fracture being near the middle, and the other near the right condyle, left before the cure was complete. Seven or eight months after he called upon Boyer, who extracted from a fistula in the meatus auditorius externus, a bony mass, which had evidently the form of the condyle.* Bichat mentions a similar case as having come under the observation of Desault;† possibly it was the same which Boyer saw. Ribes says that a Parisian surgeon treated a double fracture of the jaw in a gentleman, one fracture being through the body and the other through the neck of the condyle; and in spite of the most assiduous and skillful attention, the patient recovered with a lateral distortion of the jaw, occasioned by the displacement of the fragments.‡ Ribes himself had to treat an accident of a similar character, and notwithstanding all his care, the result was the same as in the other example just cited.§

The proximity of this fracture to the articulating surface may occasion contractions of the ligaments about the joint: and a degree of embarrassment to the motions of the jaw has followed in the experience of Desault and others, even when the cure has been most complete; but this has usually remained only for a short period.

Sanson asserts that when the coronoid process is broken, the fracture never unites; but that mastication is performed very well, the masseter and pterygoid muscles then fulfilling the office of the temporal.||

* Boyer, Lectures on Dis. of Bones, p. 53, Phila. ed. 1805.

† Desault, Treatise on Fractures and Luxations, Phila. ed., 1805, p. 3.

‡ Malgaigne, op. cit., p. 402.

§ Ibid, p. 402.

|| S. Cooper's First Lines, Amer. ed., 1844, vol. ii, p. 311

ART. II.—*Abstract of the Clinical Lectures delivered at the Buffalo Hospital of the Sisters of Charity, upon the Diseases treated in the Male Medical Ward, by AUSTIN FLINT, M. D., Attending Physician, during the present College Session, viz., from October 14th, 1857, to February 27, 1858. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. I. *For the Month of October.*

Typhoid Fever; Treatment; Spasmodic Respiration and Apoplectic Coma; Delirium during course of.

Two cases of typhoid fever, in the ward, illustrated the phenomena of this disease in its earlier and later stages. In one patient, delirium has just manifested itself. In the other, the delirium is observed only occasionally, and at night. In the former case, the delirium is active, consisting in incoherent talking and repeated attempts to get out of bed. Besides this symptom, which is now observed only at night, the mental faculties appear to be blunted, the countenance is inexpressive; aspect dull; there is slight cough and expectoration, with sibilant and sonorous râles on auscultation, and a moderate degree of febrile movement. In the latter case, which is now approaching the period of convalescence, the delirium, which a few days since was active and noticed during the greater part of the time, is now observed only occasionally at night, and consists of incoherency in talking; the intellect is brighter; the countenance more expressive; the pulse diminished in frequency and increased in volume.

Delirium is a very common and a very prominent symptom in this form of fever. It naturally excites alarm with the patient's friends; and they not only grow solicitous about his immediate condition, but frequently entertain apprehensions in regard to the ultimate recovery of his intellect. But, in the great majority of instances, after the fever has pursued its allotted course, delirium disappears, and the patient regains full possession of his intellectual faculties. We can, therefore, ensure the friends of the patient, of the transitory duration of this symptom.

In this connection, the case of the person who is now convalescing, and who, as above mentioned, was actively delirious during the career of the fever, is worthy of notice. He has been free from any aberration of mind, during the past two clinical days. But, the other night, incoherent talking on various subjects, was observed by the nurse. Since then, no farther

manifestation of delirium has been observed; and convalescence is progressing rapidly.

These occasional attacks of delirium occurring during convalescence, should not be regarded as relapses nor even as showing a tendency to relapse. True relapses in this variety or form of continued fever, are exceedingly rare. Prof. F. has met with but a single instance of the kind, in all the time the disease has been under his observation. In this case, after the fever had pursued its course and exhibited many of its ordinary and characteristic phenomena, and convalescence had been established, the patient was again subjected to a second attack of the fever, passing through its usual stages as though he had not had the disease previously

The treatment of typhoid fever as pursued in the hospital, consists in sustaining measures, and the alleviation of any unpleasant symptoms which may arise during the course of this disease. The sustaining measures are diffusible stimulants, as brandy or whisky, given in considerable doses and quite undiluted, alternating every two hours with milk porridge and the concentrated juice or essence of fresh meats, such as beef. These measures constitute the *sustaining diet* of the hospital. Hitherto, brandy has been employed generally, but the difficulty in obtaining a pure article, at a reasonable price, has led Prof. F. to the use of whisky, and this is found to answer as well the purposes for which brandy was formerly prescribed.

In the patient who is now convalescing from typhoid fever, a somewhat unusual, and at first view, strange measure was put in practice, several days since, during the height of the fever. The patient had presented for some time previous to this, distension of the abdomen, with tympanites, accompanied with frequent liquid evacuations passed in bed. The patient was actively delirious. His pulse was not small, nor was it much accelerated. Prof. F. regarding the diarrhoea as an effort of the system to relieve the intestines of their contents, directed a *saline cathartic* to be given: magnesiae sulph., 3j, every two hours until the evening, this being about noon. The following morning, the nurse stated that two doses of the above medicine had been taken, and a copious dejection occurred during the night. Since then, and for three days thereafter, no dejection was observed. There was less distension of the abdomen, and also less tympanites; and an improvement in the condition of the patient generally.

The practice of giving saline cathartics in typhoid fever, originated with the French, who place much reliance in them in cases similar to the foregoing.

The patient who was noticed on the first clinical day as being in the earlier stage of typhoid fever, presents, this morning, a symptom indicative of great danger, namely, what is known as *spasmodic respiration*; the inspiration being shortened and hurried. This was observed last evening for the first, and is not quite as marked this morning; but the patient is now becoming comatose and cannot be roused. He lies with his eyes closed, uttering no noise, and making no movement. This condition has been termed *apoplectic coma*. Spasmodic respiration precedes for a greater or less length of time, this comatose state; and when observed, we should make use of every means in our power to avert the impending danger. Prof. F. had pointed out some years since the connection between these two conditions, and the result of his observations will be found in his Report on Continued Fever, page 197, et. al.

Intermittent Fever; Treatment.

There were several cases of this form of fever in the hospital, and it would be noticed that they were treated very much alike.

In the treatment of intermittent fever, there were three indications usually: 1st. To arrest the paroxysms as speedily as possible; 2d. To continue the remedy so as to prevent their return; and 3d. To relieve the coëxisting anæmia. Quinia was the medicine used in the hospital. Large doses of the sulphate of quinia, say five grs. three times daily, were given immediately, without reference to any coëxisting complaint. In a day or two, usually, the paroxysms were arrested; and then, it was found the dose of the remedy could be diminished rapidly, so that but a grain or two, twice daily, would serve to prevent a return of the paroxysm. Whenever anæmia existed, a ferruginous tonic was added; the sulphate of iron, or citrate of iron and quinia, being commonly employed.

- A case of what is known as *latent intermittent*, was presented to the notice of the class. Here, some of the stages of the paroxysms are deficient; or it recurs at irregular intervals. A similar plan of treatment is adopted in such cases.

Prurigo.

A case now in the ward, presents the characteristic appearances of this affection, well-marked. Two, and sometimes three, species of cutaneous diseases, are mentioned by writers as belonging to the order of papulæ or pim-

ples, namely, lichen, strophulus, and prurigo. Lichen and strophulus may be considered as varieties of the same species. Prurigo differs from lichen in the following particulars: the pimples are larger, pyramidal, and flattened, instead of acuminate, and not reddened. As a general rule, the eruption is seated on the anterior part of the extremities. The pimples are colorless, and, therefore, not easily seen; they are felt better, by pressing the hand over the surface. The pruritus is severe, greater at night, and prevents sleep. Scratching does not relieve the pruritus, but excites it. The scratching occasioned by the pruritus, give rise to the presence of minute black scabs; this appearance is highly characteristic of prurigo.

Intercostal Neuralgia.

In a patient who had just been admitted, there was presented a very good example of intercostal neuralgia. This man complained of pain, quite sharp, in the lower and lateral portion of the left side of the chest, which was increased by forced breathing and by the act of coughing. On inspection of the chest, the expansive movement was instinctively restrained, the patient being unaware of any difference of expansion on the two sides of the chest. Loss or want of mobility on one side of the chest was found to exist in the course of various intra-thoracic diseases, as well as in affections of the parietes of the thorax. When this physical sign is present in intercostal neuralgia, we must be careful not to attribute it to intra-thoracic disease, such as pneumonitis or pericarditis; nor to other diseases of the walls of the thorax, as pleuritis; nor to paralysis of the respiratory muscles of the chest. These latter diseases will easily be recognized usually by recourse to a physical examination of the chest; and no difficulty would attend the diagnosis of paralysis of the muscles. Cough and expectoration were noticed in this case; but the diagnosis was rendered plain by pressing over the spine close to the spinous processes, laterally to the outside of the nipple, and anteriorly, close to the edge of the sternum. On the right side, over these portions of the thorax, no tenderness was elicited; on the left side, tenderness existed quite marked, in two or three of the intercostal spaces to the left of nipple and below it, and close to the edge of the sternum, and over the middle dorsal vertebrae. This disease is frequently mistaken for pleurodynia, but the above sign, namely, tenderness limited to three points on one side of the thorax, is characteristic of the former affection.

The *treatment* of intercostal neuralgia consists essentially in the employment of tonics and anodynes, of which quinia and morphia seem to be the

most appropriate. For further information on this disease, vide *Buff. Med. Journ.*, for July, 1857.

Pulmo-Tuberculosis.

The *pleuritic pains* attending the course of phthisis, are to be distinguished from rheumatic or neuralgic pains. The former are stitch-like and lancing, and increased more by forced respiration than by movements of the body or upper extremities; and, besides, they are not confined to particular points on the thoracic parietes, nor diffused over any considerable portion of the chest; but, usually, are present at the summit of the lung. These pleuritic pains indicate the existence of a certain amount of inflammation of the pleura. This variety of pleuritis accompanying the course of pulmo-tuberculosis, is called *dry pleuritis*, on account of the absence of liquid effusion. The pleuritis also is circumscribed, and is due to the presence of tubercles disseminated through the pulmonary tissue. The pleural surfaces become united, and thus the pleuritis proves conservative. For, as the tuberculous matter passes through its successive stages and is expelled, the union of the surfaces of the pleural membrane, prevents the evacuation of the tuberculous matter into the cavity of the pleura. That this accident does in reality occur, is well known. When tuberculosis, departing from the law of location, attacks the lower lobe of the lung, instead of the summit, the whole lobe being in a short period rendered almost useless, ulceration and perforation of the visceral layer of the pleura occur in some instances; and the disease called pneumo-hydro-thorax is produced, which very frequently proves fatal.

A patient in the ward, affected with pulmo-tuberculosis, was observed to speak with difficulty; his voice was husky; he could scarcely articulate in fact. He presented an affection of the larynx not infrequently met with in the course of pulmo-tuberculosis. This was laryngitis, or laryngeal phthisis as it was formerly called. Up to a few years ago, it was thought that tuberculosis first attacked the larynx, and then proceeded downward to the pulmonary tissue; and hence the name, laryngeal phthisis. Subsequent researches have disproved this opinion, and established, beyond a doubt, that tuberculosis first attacks the lungs, and after a greater or less period of time other organs, as the larynx, may become affected. If the former opinion had been correct, it would have been of very great importance to have arrested the disease, if practicable, whilst the larynx alone was affected. But, at the present time, knowing that tuberculosis has already invaded the lungs,

this laryngeal complication becomes of far less importance. Not infrequently there exists complete loss of voice or aphonia, and ulceration of the structure of the larynx.

ART. III.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, NOV. 3, 1857.

The association met.

Present—Drs. Wyckoff, Newman, Strong, Miner, Root, A. Flint, Jr., Lemon, and A. W. Nichols.

The President being absent, the Vice-president, Dr. Wyckoff, took the chair.

On motion, the reading of the minutes of the last meeting was dispensed with.

Dr. A. W. Nichols was appointed secretary pro. tem.

Dr. Root stated, in connection with the report at a previous meeting of the association, on swallowing of foreign bodies, the circumstance of a person who had swallowed several false teeth attached to a metallic plate, whilst asleep; cannot say whether the foreign body was passed.

Dr. A. Flint, Jr., related the following case of extensive injury to forearm:

The patient was a German boy, aged about 10 years, who had his left forearm crushed by the cars, while endeavoring to drive some cattle from the track. I saw the patient, a few hours after the accident, with Dr. Gay and Prof. Hamilton; the car had evidently passed obliquely over the arm, or one side of the arm, and had produced a fearful wound, carrying off bodily about the middle third of the radius; lacerating and contusing the muscles, and denuding the entire forearm of integument, which was, however, attached above at the elbow, and below at the wrist. None of the important vessels or nerves were injured; the joint at the wrist and elbow were uninjured, and the ulna was still sound. After a careful consideration and examination of the case, it was thought best not to operate, but to dress it as well as possible, and leave the rest to nature. The skin was accordingly tacked in its place as well as possible, and the arm laid on a board, with directions to keep the parts wet with cold water.

I saw the case about ten days after, and found that the integument had sloughed, leaving the entire forearm denuded; nearly all the rest of the radius had also come away. The surface was granulating and discharging

healthy matter. The patient was in good spirits, and there were no signs of failure of the system in consequence of the immense drain. I regret that Dr. Gay is not present, who would be able to give a much fuller account of the case.

About two months after the injury I was passing the house and stopped to see the patient, but was told that he had removed to Hamburg about a week before, and that at the time of his removal he was walking about, and the arm was doing well. I have heard nothing further from the case.

I mention this case as showing the conservatism of the present views of surgery in relation to injuries. I have no doubt but that a few years ago this limb would have inevitably been sacrificed, and must say that even now I have some doubts as to the expediency of allowing it to remain; the question is, will this immense surface ever be covered over. Prof. Hamilton suggested, that in the event of a failure we might shorten the arm by removing a portion of the ulna and thus diminish the extent of surface to be covered by new skin. It certainly would take a great length of time for such an immense ulcer to be filled up, if it ever could be. Though the result of this case is not able to be known, we learn an important lesson in regard to the immediate danger of such an injury if the operation be deferred. When I saw the case the skin appeared to have escaped with comparatively little injury; and we had strong hopes of saving the greater portion of it. I would suggest that the probable cause of the death of the integument was the rupture of the vessels which came from the subjacent tissues, and that the proper vessels of the skin which were supplied from the attachment to the elbow and wrist, was not sufficient to maintain its vitality.

Dr. Lemon related a somewhat parallel case, in *Dr. Newman's practice* And the association then adjourned.

AUSTIN W. NICHOLS, M. D.,

Secretary *pro tem.*

ART. IV.—*Human Histology, in its Relations to Descriptive Anatomy, Physiology, and Pathology. With four hundred illustrations on wood.* By E. R. PEASLEE, M. D., Professor of Physiology and Pathology in the New York Medical College; of Anatomy in Dartmouth College; and of Surgery in the Medical School of Maine, etc., etc. Philadelphia: Blanchard & Lea. 1857.

The work before us is the first elaborate treatise on histology that has been presented to the profession by an American author. Since the appearance of Bichat's great work about a quarter of a century ago, the novel and inviting field of histological research has been eagerly occupied by men of talent in all countries. America, however, appears to have cultivated this branch less than any other nation; it is now but a short time since microscopic anatomy and the application of the microscope to practical medicine and surgery, have been regularly taught in our medical schools; and though numerous works have appeared in England, and in the French and German languages, 1857 sees the first kindred publication in this country. The work of Kölliker, translated by George Busk and Thomas Graham, and edited by Dr. J. Da Costa, of Philadelphia, which is well known, doubtless, to all our readers, has become the standard work on microscopic anatomy; this however, is merely a work on microscopic anatomy and nothing more. The work of Robin and Verdeil, on anatomical and physiological chemistry (*chimie anatomique*) which has been lately issued, and is not yet translated, is, perhaps, the most elaborate and complete treatise on the subject, in any language. This treats of the anatomical and physiological chemistry of the tissues or the normal and pathological immediate principles of the human body and mammalia. Dr. Peaslee has availed himself largely of these works, and of Lehmann's *Physiological Chemistry* in the preparation of this volume.

In his own words his aim is:

"I. *To give a connected view of the simple chemical elements, of the immediate principles, the simple structural elements, and the proper tissues entering into the composition of the fluids and solids of the human body.*

"II. *To associate with the structural elements and the tissues, their function while in health and the changes they undergo in disease.*"

"In the prosecution of his object, the author has drawn more especially upon the work of Robin and Verdeil in the first part; that of Lehmann in the division including the fluids; and on Kölliker's excellent work in the part on the tissues proper. He has not hesitated, indeed, sometimes to use

the language of the latter, when sufficiently concise. He has not, however, embarrassed the text by references to the various authorities whence materials have been derived; except in instances where views varying from those of previous writers are advanced, as being, in the author's judgment, the most satisfactory at the present time."

The work is divided into two parts. Part I, treating of Stæchiology, or the description of elements; and Part II, of Histology proper. The first division of Part I, merely enumerates the elements which compose the human body; the second division, however, treats of the immediate principles. The definition of immediate principles is taken from Robin and Verdeil; they (immediate principles) are "the last bodies constituting the organism to which the tissues can be reduced by mere *anatomical analysis*; and which admit of no further subdivision without *chemical decomposition*."

The entire consideration of the anatomical elements or immediate principles of the human organism, is embraced in about seventy pages. Though the author says in the preface that he has drawn upon the works of Robin and Verdeil and of Lehmann, the reader will hardly be prepared for the extent to which these authorities (especially Robin and Verdeil) have been made to contribute. The classification of Dr. Peaslee is identical with that in the *chimie anatomique*, with the exception of the omission of a few unimportant principles; but the consideration of these elementary principles is the merest skeleton of a description, and it seems to us cannot be of much greater use to the student than a mere enumeration. The following is the classification of Dr. Peaslee:*

Tabular Classification of the Immediate Principles.

GROUP I. Principles Crystalizable or Volatile, Independently of Decomposition.

FIRST CLASS. Principles of Mineral Origin. (24.)

First Division. Gaseous and not Saline. (5.)

Oxygen,	Carbonic acid,
Hydrogen,	Water.
Nitrogen,	

* Dr. Peaslee reckons 84 immediate principles as determined; and in a foot note states that Robin and Verdeil reckon 92; this is a mistake, R. and V. reckon 96.—See *Chimie Anatomique*, vol. i, page 130.

Second Division. Salts. (19.)

Chloride of Sodium,	Sulphate of Soda,
“ “ Potassium,	“ “ Lime,
Fluoride of Calcium,	Basic Phosphate of Lime, (Bones),
Hydrochlorate of Ammonia,	Acid “ “ “
Carbonate of Lime,	Phosphate of Magnesia,
“ “ Magnesia,	Neutral Phosphate of Soda,
“ “ Potassa,	Acid “ “ “
“ “ Soda,	Phosphate of Potassa,
Bicarbonate “	Ammonio-Magnesian Phosphate.
Sulphate of Potassa,	

SECOND CLASS. Principles of Organic Origin formed within the Body by
Dis-Assimilation. (42).

First Division. Acid or Saline Principles, (23).

Lactic Acid,	Hippuric Acid,
Lactate of Soda,	Hippurate of Lime,
“ Potassa,	“ “ Soda,
“ Lime,	“ “ Potassa,
Oxalate of Lime,	Inosate of Potassa,
Uric Acid,	Pneumic Acid,
Neutral Urate of Soda,	Pneumate of Soda,
Acid “ “	Taurocholate “
Urate of Potassa,	Hyocholate “
“ Magnesia,	Glychocholate “
“ Lime,	Lithofellic Acid.
“ Ammonia,	

Second Division. Neutral Nitrogenized Compounds. (5.)
(Nitrogenized *Alkaloids.*)

Creatine,	Urea (and chloro-sodate of urea—
Creatinine,	Urea with marine salt,)
	Cystine.

Third Division. Neutral Non-nitrogenized Compounds. Sugars, (2.)

Sugar from the Liver,	Sugar of Milk.
-----------------------	----------------

Fourth Division. Fatty and Saponaceous Compounds. (18.)

Cholesterine,	Caproate of Potassa, Soda, etc.,
Oleic Acid,	Oleine,
Margaric Acid,	Margarine,
Stearic “	Stearine,
Oleate of Soda,	Elaterine,
Margarate “	Stearine.
Stearate “	

GROUP II. Principles Non-crystalizable or Non-volatile, Independently of Decomposition.

THIRD CLASS. Organic Substances or Coagulable Principles. (18.)

First Division. Those Naturally Liquid. (7.)

Fibrine,	Pancreatine,
Albumen,	Mucosine,
Albuminose,	Ptyaline,
Caseine,	

Second Division. The Solid and Demi-solid. (7.)

Globuline,	Cartilagine,
Crystalline,	Osteine,
Musculine,	Keratine.
Elasticine,	

Third Division. Pigmentary Substances. (4.)

Hematine or Hematosine,	Melanine,
Biliverdine,	Unosacine.

The author adds to this an enumeration of “Certain immediate principles of probable or certain existence, though not well determined, and substances known to exist, but doubtful as immediate principles.”*

The author then proceeds to a consideration of the individual immediate principles according to the classification. In treating of carbonic acid he quotes the statement of Robin and Verdeil that there is actually more of this gas in

* Quoted from Robin and Verdeil.

solution, in the arterial than in the venous blood; this fact is not generally known to the profession of this country, and is disputed by most of the English and American physiologists; it is in direct opposition to the generally received and taught doctrines, and therefore would seem to merit at the author's hands something more than a mere statement. We have such an array of distinguished authority against it, that in a work like this, we would expect to be told the grounds on which this assertion is based; the author leaves the subject, however, without the smallest sustaining argument. This barrenness of detail characterizes the whole of Part I.

Passing over the consideration of the remaining articles of the first class, and the articles of the second class, (which are treated of very briefly,) we come to articles of the third class, i. e. Organic Substances, or Coagulable Principles. This is by far the most important class of elements, and receives a correspondingly lengthy consideration, though by no means sufficiently extended. In treating of fibrin, the author's views do not seem to be modeled upon the opinions of Robin and Verdeil, as in other instances, or indeed upon the doctrine taught by the most advanced physiologists of the day. In speaking of coagulation he says, "Coagulation is fibrillation, and is to be regarded as a vital act, since it is organization, though, perhaps, of the lowest kind. But fibrillation is the last and highest vital act of the fibrin." Robin and Verdeil take the ground, and in our opinion sustain it, that coagulation is not a vital act, and that mere coagulated fibrin is never organized. Vital processes only go on within the organism, and the coagulation of fibrin *never* takes place under normal conditions, but either when it is removed from the vessels or when the circulation is arrested; mere motion is not sufficient to prevent the coagulation of fibrin, for we find that it readily deposits itself about a bundle of twigs agitated in freshly drawn blood. The fibrin in the vessels, in healthy circulation, is in its normal condition, and remains fluid; but when we remove it from its normal situation, this removal has the same effect as heat upon albumen, it coagulates it. The mere fact of fibrillation during coagulation, is no argument in favor of its being a vital act, and the commencement of organization. Is there any reason why fibrin should not have a tendency to coagulate in a particular form, as well as that the triple phosphate should have a tendency to resolve itself into prisms? And yet Dr. Peasee certainly would not assert that the crystallization of the triple phosphate was the commencement of organization, and we can easily distinguish fibrils of fibrin from proper areolar tissue, or any other tissue, as crystals of the triple phosphate from a muscular fibre.

We have already been betrayed into too lengthy a consideration of Part

I, and now pass to Part II, which presents a more inviting appearance. We hope ere long to see a translation of the work which has been made use of so largely by Dr. Peaslee, but in the mean time would recommend those who are not satisfied with this meagre compendium, to consult it in the French; they would then be able to see how little justice has been done to the French authors, and how clearly every point, which is here merely stated, is elaborated and sustained by sound observation and deduction.

Part II consists of three divisions:

First. "A description of the simple histological elements, their distribution, development, &c."

Second. "Of the fluids in the human body which contain histological elements."

Third. "Of the tissues properly so-called."

Parts second and third may be deemed as really embodying the substance of the book, and from the simple arrangement and division, as well as for other merits as a text book, will be of great value to the medical student. The work of Kölliker is more elaborate, and better adapted to the wants of one further advanced in histological investigation; it treats only of healthy microscopic anatomy, while the work of Dr. Peaslee, at the same time considers pathological histology.

The bulk of the first division of Part II is occupied by a consideration of cells, or cytology. This subject is discussed at length, and the views of cell development which are now generally received, are here put forward. Free cell development is first considered, that is, the development of cells in a clear plasma. The author seems to us to be a little obscure in his arguments in this connection, but at all events, he arrives at the conclusion, in regard to the formation of cells: "That no sufficient reason appears why a primary utricle may not be, in all cases, as easily formed in clear plasma, as a nucleus can; and if this becomes a cell in one instance, and then forms a nucleus *within* itself, it is hardly probable that a nucleus on the other hand, is first formed in other instances, and then forms a cell *around* itself. It is far more probable that the first cells are formed in a clear plasma without the aid of a nucleus, they being merely fully developed utricles; true *free cell* formation always proceeding in this way. The second generation of cells may be formed from the nuclei in the first, or not; but if so it is endogenous formation and not the form of development here under consideration."

It seems to us that there is a sufficient reason why it is more probable that cells are formed subsequent to the nuclei if not from them, than that

nuclei are formed after the development of cells. A cell, according to Dr. Peaslee's own definition in the preceding page,) consists of a cell wall, a contained fluid, granules floating in the fluid, a nucleus and nucleolus. Now if the cells were first developed and then the nucleus, we should expect often to see cells without nuclei, or cells which had not had sufficient time to form their nuclei; but in support of the other side of the question we have the fact that we often see great quantities of free nuclei, both in health and in morbid structures, while we much more rarely see a cell in which there is no nucleus.

The subject of cell development is full of obscurity, and if taking the ground of some of the French positive philosophers, that we were to believe only what can be demonstrated, we should be compelled to acknowledge ourselves unable to say whether a cell elongated and became a fibre, or whether a fibre contracted and became a cell. Some of the most distinguished French microscopists have reduced the class of cells in the organism to a very small space, regarding those only as cells in which a membrane can be demonstrated; and this becomes a difficult matter in cells the size of a blood disc or a tubercular corpuscle.*

The author finishes the division on cells by a consideration of the cancer cell, which has been the cause of so much controversy within the last few years. He takes the ground that "in all cases of *well developed* cancerous formation, the microscope, in the hands of one *skilled in its use*, will alone demonstrate the true character of the growth, unaided by any knowledge of the appearance to the naked eye, of its tactile properties, or of the history of the case." We are surprised at any modern writer taking such decided ground as this; giving to the microscope what its most earnest defenders and the most expert proficient in its use, have ceased to claim for it; we have ourselves repeatedly examined specimens of tumors which were undoubtedly of a cancerous character, and failed, after repeated and patient endeavors, to find the cancer cell. We cannot claim, however, to be sufficiently skilled in its use to present this alone as an argument against Dr. Paislee's assertion; but we know that this is the experience of some of the most skillful and reliable microscopists in the country, one of whom, espe-

* The views of Robin on this subject may be found in the Dictionnaire de Médecine, under the head of cellule. He regards all the vegetable tissues as cellular and formed by cells, and also that the ovum is developed in the same way; but in the fully developed human body, he is of the opinion that a great many things have been called cells which have not the first element of a cell, i. e. the cell wall; and that they are merely semi-solid masses of matter.

cially we can recollect searching repeatedly for the cancer cell, in a growth about which there could be no manner of doubt as to its cancerous character, and which eventually killed the patient, though the cancer cell could never be discovered.

The second division of Part II treats of the animal fluids. It gives a clear and distinct account of the blood, lymph, chyle, serous secretions, transudations, exudations, pus, mucus, gastric and intestinal fluids, and all the fluids of the human organism. The anatomy of the fluids, however, is by far the most elaborately considered, though we have at the same time a brief sketch of their physiological relations and some of their pathological changes.

The third and last division, comprising more than half the entire volume, is devoted to a consideration of the tissues proper. Beginning with epithelium, the author describes the various varieties, their mode of development, physiological uses, dimensions and distribution, with some of their pathological changes; especially as seen in the disease known as epithelial cancer; the remainder of the chapter is occupied by a similar consideration of the hair and nails.

We have not the space to follow the author closely through the descriptions of fibrous tissue, areolar tissue, adipose tissue, etc., but can merely state that the same plan is adopted in the consideration of these, as of the preceding tissues, i. e. we have the anatomy of the tissue, a sketch of its development, physiological uses and pathological changes. As both the physiology and development, and the pathological changes are in themselves sufficient to occupy a large volume in their elaborate consideration; in such a work as we have before us, we could not expect, nor do we have, anything more than a mere outline of these portions of the subject.

In speaking of fatty degeneration, we are glad to see the author giving a clear and unmistakable definition of the term. The term itself implies an actual degeneration of organs or parts of the body into fat. This, however, is not the fact, "An organ in a state of fatty degeneration is one, some or all of whose structural elements have been *replaced by fat in the form of globules or granules*, and not inclosed in fat cells." This is the true process which goes on in the so-called fatty degeneration of various organs of the body, as the liver or heart; the normal anatomical element of the organ is absorbed, and instead of being replaced by the same substance as in health, is replaced by fat. The term "fatty replacement or substitution" then, would be infinitely preferable to "fatty degeneration," but the difficulty of substituting a new term, though it be exactly expressive of the process which

we wish to describe, for one which has been long in general use, is almost insurmountable.

We would gladly follow out the remainder of this work, especially as we have dwelt on the least attractive and meritorious portion, namely, Part I; we were betrayed into such an extended notice of that portion, for the reason that it contained many of the views of Robin, (whom we regard as one of the most brilliant lights of the profession in any country,) and other writers which have never received much attention in this country, and many of which are not even known. We are glad to see them thus brought before the profession, but at the same time regret that they are not entered into more fully by the author of the present volume. The discovery of pneumic acid, for example, by Verdeil, with its bearings on the physiology of respiration and the interchange of gases in the lungs, presents a field which should be somewhat occupied even in a volume of this character. The peculiar views of Robin on cells are not even mentioned, and being but little known to Americans, this would have been an admirable opportunity of bringing them forward and discussing their merits. Still, all these questions could not have been more fully elaborated without materially augmenting the size of the volume, which would have made it appear more formidable to the medical student, for whom it is especially intended. We think it would have been better to have omitted Part I entirely, and elaborated more fully the pathological sections of Part II. It is much more easy to elaborate than to abridge, and we can easily conceive how difficult a task it has been to condense into seventy pages, matter which is sufficient to occupy three large volumes. If the ground which Dr. Peaslee attempted to occupy were less broad, we conceive that he would have made a much more useful and acceptable book.

The purely histological portion, however, seems in every way adapted to the wants of the student, and is in a much better form than any we have yet seen. The views are sound and ably sustained, and the description sufficiently minute for the purpose. Among the wood cuts we recognize the faces of many a familiar friend which has contributed to illustrate numerous other works on this subject.

In conclusion, we would state as our general opinion of the work, that as a text-book, and a companion to lectures, it cannot fail to be exceedingly useful; and while the author certainly cannot claim any degree of originality, or even that he has represented the existing state of knowledge on the subjects of which he treats; yet it bears the impress of careful and judicious preparation, and in most instances, inculcates sound doctrine. r.

ART. V.—*Report of Mortality in Buffalo for the month of Oct., 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accident, ...	8	7	1
Apoplexy, ...	1		1
Asphyxia Immersorum, ...	3	3	
Bronchitis, ...	1	1	
Croup, ...	1	1	
Cholera Infantum, ...	15	7	7
Cephalitis, ...	3	3	
Diarrhœa, ...	13	2	11
Dentition, ...	6	2	3
Dysentery, ...	14	10	4
Debilitas Senilis, ...	7	4	3
Eclampsia, ...	20	10	10
Febris Typhoid, ...	6	2	4
" Scarlatina, ...	5	2	3
" Remittent, ...	2	1	1
" Ignotus, ...	1	1	
Hernia, ...	1		1
Hyperæmia Cerebralis, ...	1		1
" Pulmonalis, ...	1		1
Hydrocephalus, ...	4	2	2
Ignotus, ...	26	15	11
Laryngitis, ...	1		1
Marasmus, ...	7	4	3
Morbus Cordis, ...	2	2	
" Cerebralis, ...	1	1	
Paralysis, ...	2		2
Pertussis, ...	7	5	2
Pneumonitis, ...	4	1	3
Rubeola, ...	3	2	1
Syphilis, ...	1		1
Still-born, ...	12	9	2
Tumor Ovarian, ...	1		1
Tabes Mesenterica, ...	3	2	
Tuberculosis Pulmonalis, ...	19	9	10
Total, ...	202		

SEXES.

Males, ...	108
Females, ...	62
Sex not given, ...	12
Total, ...	202

AGES.

Still-born, ...	13	Between 20 years and 30 years, ...	12
1 day, ...	6	" 30 " " 40 "	9
1 day and 30 days, ...	11	" 40 " " 50 "	10
Between 1 month and 6 months, ...	30	" 50 " " 60 "	14
" 6 months and 12 "	13	" 60 " " 70 "	10
" 1 year " 3 years, ...	20	" 70 " " 80 "	3
" 3 " " 5 "	16	" 80 " " 90 "	1
" 5 " " 10 "	7	" 90 " " 100 "	0
" 10 " " 20 "	7	" 100 " " "	0
Total number under 10 years, ...	116	Total number over 10 years, ...	66
Ages not given, ...	2	Total, ...	202

NATIVITIES.

American, (white,)	109	Prussian, ...	0
" (colored,)	3	Saxon, ...	0
German, ...	41	French, ...	1
Irish, ...	15	Scotch, ...	0
English, ...	5	Poland, ...	0
Canadian, ...	1	Country not given, ...	27
Total, ...			202

Electricity in the Suppression of the Lactal Secretion.—M. Becquerel, in a late communication to the Société Médicale des Hôpitaux de Paris, has made some remarks upon the influences of electricity in restoring the secretion of milk. His attention was called to the subject by a case related to him by M. Aubert, who had employed electricity in the case of a young woman, whose milk had been suppressed in consequence of a double pneumonia. The electricity was applied to the breast by means of moist excitors, and after four applications, each lasting twenty minutes, the lactal secretion was completely restored.—*British and Foreign Medico-Chirurgical Review*, from *Cincinnati Med. Observer*.

Extraordinary Fecundity.—It is stated in a recent No. of the Magazine of Natural History, &c., of Moscow, that the peasant Kirilow was presented, along with his wife, to the Empress. This peasant was married, for the second time, at the age of 70. His first wife was delivered twenty-one times: four times of four infants at a birth; seven times of three infants, and ten times of twins: in all, fifty-seven children then alive. The second wife had already been delivered seven times: once of triplets; and six times of twins: in all, fifteen living children.—*Med. News*.

ECLECTIC DEPARTMENT,

AND SPIRIT OF THE MEDICAL PERIODICAL PRESS

The Death of Charlotte Brontë.—Dr. Walter Channing has an article under this title in the Boston Medical and Surgical Journal. Its purpose is to show that it is the duty of the physician, in cases of pregnancy, where the symptoms of that state become morbidly severe, as they did in the case of Charlotte Brontë, endangering the life of the patient, to remove the fetus. Dr. Channing says:

"It is one of the professional relations of our subject—the treatment of the signs of pregnancy when morbidly aggravated, that we would now speak. Was the cause, the motive cause of those symptoms that produced death in Charlotte Brontë removed? This question is of great interest. Nearly half a century ago, it was our privilege to attend the midwifery lectures of Dr. John Haighton, in London; and a better lecturer than Haighton, is not in our memory. He discussed this question of removing the cause of those symptoms, and showed conclusively that in cases in which other means had failed, and the worst consequences were to be looked for, it was the duty of the physician to remove the cause, viz., to remove the fetus from the womb. Haighton related his experience, and dwelt on the opposition he had met with in consultations, to such measures as he knew could alone save life. More recently we have spoken with eminent men abroad, on this subject, and have met with objections to this practice; or, when it has been allowed to be proper, it has been after so much evil has been done that there has hardly been any reason to look for success from it. We have felt it our duty to resort to the measure under consideration, and in every case recovery has been rapid and complete."

He goes on to say that he has known death to happen when the measure has been rejected, and when other means have been faithfully used. He names one case in which the mother of the patient refused to consent, unless the physician would guarantee success. This he would not do and the patient died. A clergyman's wife has twice been reduced by nausea and vomiting to excessive weakness, and after full trial of other methods, and it was ascertained that the disease was rapidly increasing, the operation was performed twice, with perfect success. It was also successfully tried in the

case of a lady after convulsive movements had occurred in the universal exhaustion. In conclusion, Dr. Channing says:

"We dwell on these cases, because a grave moral question is involved in our subject; and to say that it is only in those cases in which life is clearly in jeopardy, that any physician who deserves the name, would for a moment entertain the question we are considering. It is then as a *remedy*, and only to be used under what we really believe to be desperate circumstances. Whether the cause was removed in Charlotte Bronte's case, or whether she died of pregnancy, we know not. But as the disease continued unrelieved till death, may it not be asked if the cause of that disease did not remain undisturbed till it became the cause of death? The question is put, because in no like case which has come under our care, however unpromising, has death occurred after the removal of the contents of the womb."

The Duties of State Assayers in Relation to Quack Medicines.—The newspapers are constantly puffing quack medicines, whose innocuous or beneficial effects are certified to by State Assayers. One of the most unprofessional of these certificates accompanies the Peruvian Syrup. Whatever the wording may be, the readers of quack advertisements infer, from its tone, that the Peruvian Syrup has virtues which are not possessed by the citrate, tartrate, lactate and other preparations well known to the profession. There is a common idea in the public mind, that the tincture of the chloride, and iron rust, are the forms in which Iron is given, and that this certificate is in favor of a substitute for those exceedingly disagreeable preparations. To the profession at large, the Peruvian Syrup is a secret remedy, and as a secret remedy it does harm. Is not the certificate in favor of such irregular practice?

Every paper that comes to your door contains a State Assayer's puff for somebody's Bourbon whiskey. Can a State Assayer's analysis show the difference between Columbia and Bourbon?

Green's mixture of cinchona and sulphuric acid used to bear an assayer's certificate, if it does not now; an irregularity which, in any other State, would subject him to trial before the medical association.

It has been reported quite extensively, that a State Assayer's duties under the law require that he should give a certificate of the composition of any article brought to him for examination. The only statute which I can find (there may be others) in the Massachusetts laws, alluding to the duties of that office, is as follows:

"§ 1. *Be it enacted, &c.* The Governor, with the advice and consent of the Council, may appoint one or more suitable persons to be assayers of ores and metals, who shall be sworn to the faithful discharge of their duties.

"§ 2. It shall be the duty of each assayer to assay such ores and metals as may be offered him for assay, and to give a certificate thereof, for which service he shall be paid a reasonable compensation by the person procuring such assay to be made.

"Approved March 18th, 1846."

It must be under the provisions of some other act that the assay of Bourbon Whiskey and Peruvian Syrup come, but I cannot find it.

The object of making the office doubtless was, to encourage the working of valuable mineral deposits, which were known or supposed to exist in various parts of the State. The manufacture of quack medicines is a branch of industry, probably, not in the view of the Legislature of 1846.

—*Boston Medical and Surgical Journal.*

C. E. B.

Simple Method of Preventing Accidents from Chloroform.—The following plan is recommended by a correspondent of the Medical Times and Gazette, as one which the author has found uniformly successful both in midwifery and surgical cases. He says:

Although I have used it at least one thousand times, I have never seen the least bad consequences follow from it, and I consider that this success depends greatly on the precaution I take before administering the chloroform; this simply consists in administering a glass of spirits or wine—I prefer the former, even to ladies. The wine, or spirits, seem to exercise no effect on the chloroform, while their stimulating quality keeps up the action of the heart during the time the patient is under chloroform, and prevents sinking. I had occasion some years ago, to perform a slight surgical operation on a lady who was fearfully afflicted with asthma and excessively nervous. Her husband being a medical man, now in the west-end of London, objected to the use of chloroform in such a case, but I assured him that the wine would prevent any evil happening. The operation was performed, the patient saved from the pain of it, and to her great relief she had no return of asthma for a long time, and when it did return, she had recourse to the chloroform, which, for a time, gave her great relief. On one occasion, while I was removing a scirrhus tumor, the patient, who was rather advanced in life, got an overdose of chloroform, and we had great fears of her being permanently roused, and I do believe her recovery was owing entirely to injecting a glass of brandy and water into the rectum. The accident happened owing to the gentleman who had charge of the chloroform getting so interested in the dissection, that he forgot to raise the towel off her face till respiration had become imperceptible. However, she soon rallied.—*Medical Times & Gaz.; Braithwaite's Retrospect*, 1857, from *N. O. Med. & Surg. Journal*.

Large Congenital Aneurismal Tumor successfully treated by a New Method. By E. K. SANBORN, M. D., Lowell, Mass., Prof. of Surgery in the Berkshire Medical Institution.

The history of the following case is familiar to a large number of medical gentlemen, who as students and practitioners have witnessed the various expedients that have been resorted to, at various times during the last three years, at the clinique of the Berkshire Medical Institution, in attempts to arrest the growth of this tumor. As the disease is one of great surgical interest generally, I have thought the case worthy of record, and furnish the following brief account from minutes made at the time of the operation, with

a drawing illustrating the successful method of treatment; and which, so far as I know, is new.

Mr. B., an intelligent young man, 20 years of age, was first brought before the class at the Medical College in Pittsfield, by his attending physician, Dr. Lawrence, of South Adams, Mass., in the autumn of 1855. He was somewhat pallid, and anæmic; but was in very good health, with the exception of a large, pulsating tumor, extending from near the ear to the top of the head, forward to the temple, and backward to the mastoid process of the temporal bone. It was not covered with hair; was of a bluish color, pulsated, *visibly*, over its whole extent, and communicated the peculiar aneurismal thrill to the ear. The rush of blood through the tumor caused a continued and loud ringing noise in the ear of the patient, and at night especially, this was often so disagreeable as to prevent sleep. Within a short time, there had also been several alarming attacks of hæmorrhage, of an arterial character, the blood coming from a small rupture of the thin walls of the tumor. These attacks usually occurred in the night, while the patient was asleep, and awoke him by causing throbbing in the tumor, and faintness. The bleeding had been arrested by long continued pressure.

Dr. Lawrence stated "that the tumor had first attracted notice soon after birth, as a small purple *navus* in the scalp, just above the ear—that it had steadily increased with the growth of the patient, until the present time. The period when pulsation was first noticed could not be ascertained. The swelling had never been treated except by pressure—which had been thoroughly, but ineffectually tried, early in the history of the disease." Dr. T. Childs, then Professor of Surgery in the Berkshire Medical Institution, proposed to treat the disease by cutting off the arterial supply of blood. Accordingly, a large number of arteries leading to the tumor were tied. The *occipital*, *temporal* and several other arteries of the scalp, which had become greatly enlarged, were successively ligatured, but without any permanent benefit. The treatment by puncture with red-hot needles was also attempted, but was followed by profuse hæmorrhage, and it was abandoned. Finally, at the last clinique of the term of 1855, Prof. Childs tied the common carotid of the side corresponding to the tumor. The size of the tumor was sensibly diminished by this operation, and it was thought that, conjoined with local pressure, it might effect a cure. But pulsation was reëstablished soon after the separation of the ligature, and the tumor again began to increase.

During the autumn session of 1856, Mr. B. was again brought before the class, having recently suffered severely from hæmorrhage, and showing the effects of loss of blood in his countenance. The case now came under my care; and as the young man himself was quite desirous of having the carotid of the other side ligatured, a day was appointed for the operation. On reviewing the history of previous operations, and examining closely the nature of this tumor, in reference to further procedure, I was led to make a change in the plan of treatment, by the following considerations:

- 1st. That the tumor was composed of arteries and veins—the bulk of the tumor consisting of dilated veins; and therefore any operation performed on the supplying arteries would not materially change the structure of the tumor, and would be unavailing.

- 2d. Ligature of the carotid had shown that the tumor would retain a marked size, and pulsation, with a very small supply of blood; and as a year had elapsed since the operation, tying the other carotid would not be likely

to entirely stop the passage of blood through the tumor, on account of the collateral circulation.

Accordingly, the idea of this operation was abandoned, and the subsequent treatment was directed to the tumor itself. The operation at first performed, was similar to that of tying a varicose vein over a pin or needle. A long needle was entered through the healthy scalp, opposite the middle of the tumor and about an inch from its border, and carried under the tumor, following the skull closely, and coming out at a corresponding point on the opposite side; great care being taken not to penetrate the cavity of the tumor itself. A strong silk ligature was then twisted over the ends of the needle, and drawn as tightly as possible. This operation was repeated five or six times in different parts of the tumor. The needles were removed as soon as they were loosened by ulceration, which was usually in about a week. Under this treatment, the tumor perceptibly diminished in size, and, at times, the pulsations ceased; but it failed to arrest the circulation through the tumor, for the reason that as the ligature ulcerated through the folds of scalp which were necessarily gathered up between the needle and the silk, the pressure was diminished, the circulation was reestablished, and at the end of three months it was found that, although smaller, the tumor was not radically changed in character.

The difficulty above alluded to was finally obviated by the plan indicated in the wood cut.* A long needle was thrust under the tumor as before; then, instead of the twisted suture, another needle, corresponding in length to the first, was placed over it, on the outside of the tumor, and the two ends were then tied together, so that the opposite walls of the tumor were brought in contact with each other by a sort of clamp. The portion of the tumor and scalp embraced between the needles thus arranged, sloughed, and the lower needle ulcerated entirely through, and was lifted out or through the tumor, on the sixth day, without hæmorrhage.

Three others were then put in, and, at one time, the patient had four of these needles, fastened in the way described, and embracing the tumor in various directions, without suffering serious inconvenience. In performing this operation, the two needles were made fast together at one end, while the other ends were brought together gradually, the force being applied somewhat after the fashion of that of the ordinary nut-cracker. The pulsation disappeared after the application of the second needle: and I recently had the pleasure of presenting my patient to the class, entirely cured—the cicatrices left by the needles alone showing the situation of the former tumor.

—*Boston Med. & Surg. Journal.*

Excito-Secretory System—New Claimants of the Discovery.—Our readers are aware that after the application of the doctrine of reflex nervous action to the process of secretion, by Dr. Marshall Hall, the priority of the suggestion was claimed by Dr. Campbell, of Augusta, Ga., and subsequently acknowledged by the illustrious English physiologist. Of late, Dr. Campbell's claim has been contested by two other American physicians. In the

* The wood cut which accompanies the article in the Boston Jour. is omitted. *v.*

September number of the Medical Independent, Dr. J. Adams Allen, Professor of Materia Medica in the University of Michigan, announced that the excito-secretory doctrine had been publicly taught and illustrated by him, while professor at the Indiana Medical College, as early as November, 1848, that is, two years before the date claimed by Dr. Campbell for his announcement. But in the November number of the same Journal, we find an article by Dr. Martyn Paine, of New York, who states that the idea of the excito-secretory function has been publicly taught by him ever since the year 1841, in his lectures at the University of New York, and is embodied in his "Institutes of Medicine," published in 1847; and that, moreover, the idea of the generalization of excito-motory action throughout the system, which Dr. Marshall Hall believed originated with himself, may be found in the same work.—*Ibid.*

We copy from the American Medical Gazette, the portion of the report of the Section on Materia Medica and Botany, to whom was referred the subject of condensed milk. The first part of the report has reference to the constitution and physiology of milk, and we have retained only the portion which refers to the condensed milk.

r.

"It affords the Section no small degree of satisfaction to be able to state to the academy that, after a thorough examination of this subject, they are fully convinced that in 'Borden's Condensed Milk' the citizens of New York may be furnished with an article that for purity, durability, and economy, is hitherto unequalled in the annals of the milk trade. The facilities that he enjoys, both in a pecuniary and scientific point of view, added to the high character he sustains as an honest, upright man, not only afford him no inducement for deception, but on the contrary, should be sufficient to inspire all with implicit confidence in the truth of his statements, and insure the final success of his undertaking.

"In order to carry out his views to the greatest advantage both to himself and patrons, he has selected for the seat of his operations, a section of country abounding in rich pastures and healthy cattle, and so remote from the city as to enable him to procure milk from the neighboring farmers at a much cheaper rate than is usually paid by the milk dealers. As soon as received, it is with as little delay as possible deprived of a greater part of its watery portion, leaving the nutritious portion wholly unaffected, and in a portable condition. In the examination of the merits of this article, the section have thought proper to acquaint themselves, as far as possible, with the mode of its preparation, to test its value as an article of diet, its therapeutic virtues, its purity, its durability, and economy.

"In order to become more thoroughly satisfied concerning the manner in which this milk is prepared, it was thought advisable that the whole process be submitted to the careful inspection of some member of the section. Accordingly, the secretary, accompanied by Dr. Griscom, (who has kindly volunteered his assistance in the investigation of this most interesting subject,) at their earliest convenience, visited the laboratory of Messrs. Borden & Co., and were enabled to witness the process through its different stages, from

the milking of the cows to its final completion. The milk, immediately after leaving the cow, was strained into an ordinary milk can, then placed in a cold water bath, and there it remained until it was entirely deprived of its animal heat. It was then placed in a hot bath, and soon as possible raised to a temperature of about 175° Fahrenheit. This caused a slight deposit of a viscid albuminous matter upon the sides of the can, which, if allowed to take place in the evaporating pan, greatly retards the process of evaporation. The milk is now passed through a second strainer, and without delay removed to a vacuum pan, where the water is evaporated. This pan consists of a large metallic vessel, supplied with a jacket for the reception of steam, by means of which the heat is applied. Connected with the pan, by a tube, is a barometer that indicates at a glance the extent of vacuum, and by another tube, which serves also for the escape and condensation of steam, an air pump in constant motion. A thermometer, also in direct communication with the interior of the pan, indicates the temperature, and by means of a glass light in either side of the pan we can from time to time witness the progress of the evaporation. While witnessing the process, every few minutes a note was made of the temperature, extent of vacuum, and other points of interest. For instance, at 9 o'clock there were 247 quarts in the pan, boiling at a temperature of 118° in a vacuum of 27½ inches. At forty minutes past 9, 180 quarts were added; at thirty-five minutes past ten, 240 quarts were added, making in all 667 quarts, which by thirty-five minutes past 1 o'clock was evaporated to one-fourth the quantity. During this time the temperature was twice observed to be above 130°, but most of the time it was from 115° to 126°. An opportunity was also afforded to test the relative quality of milk from the respective farms. Thus, from five different farms the milk was examined by the lactometer, and showed that the morning's milk was of a richer quality than the evening's. The cows taking little or no exercise during the night, less fat is required to support the respiration, and consequently more allowed to pass into the milk. The milk from one farm, where the cows were thin in flesh and seemed destitute of fat, was superior to the milk of cows that presented to the eye a more attractive figure. It is a fact familiar to every medical man, that those mothers who are of a slender frame, small muscular development, and deficient in adipose tissue, often afford better nourishment for their offspring than many mothers of a full and plethoric habit. In the one case the fat and casein supplied by the food passes into the milk; in the other, more of the one is deposited and retained in the areolar tissue and the other contributes to the support and development of the muscular system. During the preparation of this milk, your committee beheld nothing that was not to their minds eminently satisfactory, both in the frankness with which everything pertaining to the subject was submitted to our examination, and the intelligence manifested in the replies to our many inquiries.

"In reference to the condensed milk as an article of diet, its importance is at once established by the fact that it retains all of the nutritive qualities of milk uninjured. Cheese made from it is superior to common cheese, as it contains not only the casein and butter, (the beef and fat,) but the sugar also, which, as before stated, supplies the starchy matter of vegetable food. In the ordinary method of cheese-making, the sugar is lost in the whey, thus depriving us of a very important element of nutrition. Used in its condensed form, this milk imparts a delicious flavor to coffee, fully equal to that

of thick cream, and in short, as far as could be ascertained upon the most rigid inquiry, it has, whenever used in the various departments of the culinary art, given entire satisfaction. Its therapeutic value is restricted to that of pure milk and cream, and wherever these are indicated the condensed milk is equally valuable. It has been suggested as a substitute for cod liver oil, and in those cases in which the oil is not tolerated by the stomach, and cream has fulfilled the indications presented, the same amount of benefit may be derived from its employment; but as its amount of carbonaceous matter is so much less in proportion to its volume than exists in the oil, the section are not prepared to say that it can in all cases be substituted for that remedy. The opinion prevails to a considerable extent, that boiled milk has a strong tendency to constipate the bowels, and that question has been raised in reference to the condensed milk. To a note addressed to Professor Henry G. Cox, Physician to the Nursery Hospital, where the milk has been used for the last two months, that gentleman replies that it has no such tendency, He is pleased with it as an article of diet for children in the absence of pure new milk, and he adds, 'if Mr. Borden continues to furnish it unadulterated, I think it will be a great improvement to the public over the manufactured milk now so generally in use.'

"In order to test its purity, it has been submitted to careful microscopical examinations as well as different chemical tests, and found to contain nothing but pure milk. In this connection it might be well to add, that when allowed to stand for some time, small crystals are deposited upon the bottom of the can, which has given rise to the remark, that some foreign substance had been added to the milk. These crystals are nothing but the sugar of milk, and so far from being an objection, they afford proof that the milk has undergone no decomposition. They are readily dissolved upon the addition of water. Its durability depends in a great measure upon the manner in which it is kept. When exposed to the influence of hot, damp weather, it will remain sweet but little longer than ordinary milk. If kept upon ice, or in cold weather, it will remain sweet for many weeks. When hermetically sealed, it will keep for many months, or even years. In answer to enquiries on this part of the subject, the following communications were received:

Office of N. Y. and Liverpool U. S. M. Steamers, Oct. 29, 1857.

Dr. T. H. JAMES, Sec'y of Med. Com.:

DEAR SIR,—In answer to your inquiries relative to Borden's Condensed Milk, I have to state that it has been used on board of this line of steamers for several voyages, and ascertaining that it would keep to Europe and back, it is put on board for the return voyage, and found good on return of ship to this port.

G. BRIGGS,
Sup't of Collins' Steamships.

Steamship Augusta, October 29th, 1857.

Dr. E. H. JONES, Sec'y of Med. Com.:

DEAR SIR,—In answer to your inquiries in relation to Borden's Concentrated Milk, I beg leave to state that the Steamer Augusta has used it exclusively for the last two or three months on her passage to and from Savannah, Geo., with convenience to the ship and comfort of the passengers. I

also learn that the Steamer Alabama, sailing to the same port, exclusively uses the milk.

Respectfully,

DAVID SIMMONS,
Chief Steward Steamer Augusta.

A communication was also received from Hutchinson & Co., ice dealers, stating that they had furnished steamships with this milk, and in no instance had heard any complaint of its becoming sour. Full directions are given by the proprietor on this subject, and those who follow out faithfully these directions, will find it quite as durable as is represented. Its economy is entirely in the hands of the consumer. It is sold in its condensed form at thirty-two cents per quart. Add three quarts of water, and we have four quarts of pure cows' milk. Add another quart of water, and we have five quarts of better milk than is usually supplied at our doors. Should any one desire a still cheaper article, he can learn how to obtain it, by referring to an account of a recent meeting of milkmen, given in the New York Daily Times of Monday, Nov. 2d.

In conclusion, the section beg leave to assure the academy that they believe Borden's Condensed Milk to be what it purports to be, and nothing more, viz., pure milk deprived of most of its water, and deficient in none of its nutritive elements. They believe it to be the best possible substitute for pure new milk that can be had in this or any other city. Equally adapted to the wants of all conditions of life, and often a valuable auxiliary to the physician, either in private or hospital practice. And as such, the section would earnestly recommend it to the favorable notice of the academy.

Respectfully submitted,

JOEL FOSTER, M. D., Chairman.
E. H. JAMES, M. D., Secretary.

Respiratory Muscle. Observed by POWHATAN JORDAN, M. D.,
of Washington, D. C.

On the night of the 13th December, 1855, while assisting a student in the dissecting room of the medical department of the Georgetown College, in dissecting out the pectoralis major, I perceived fibres which crossed the general course of the muscle at right angles. Never having seen anything of the kind before, I traced them carefully up, and to my surprise, and to that of the demonstrator, and of the students present, I was able to exhibit, from origin to insertion, a very beautiful triangularly shaped muscle, arising from fifth costal cartilage of the side, by a triangular fleshy belly, becoming tendinous about two inches from its origin, passing upward obliquely across the sternum, and inserting by a long, fine, bright, silvery tendon into the tendon of the sterno-cleido mastoideus of the left side, or rather in common with that muscle, into the left superior portion of the sternum.

There was no appearance of a corresponding fellow on the opposite side. Its action can be no other than to assist in elevating the costal cartilages, and it therefore must be considered as an accessory muscle of respiration.

Nothing of the kind ever having been seen by any of the faculty of the college, or by myself, at the request of Dr. Johnson Elliot, the professor of anatomy, I removed the sternum with the muscle attached, and made a preparation of it for his cabinet. I should not have thought enough of the matter to have reported it, had it not occurred to me again in the same building, and in this second case, with its fellow of the opposite, fully developed. I was engaged in assisting Dr. Elliot in making a dissection for his next day's lecture, and while displaying the pectoralis major, I remarked muscular fibres similar to those before mentioned. Much struck by the circumstance, I worked them out, and found a muscle in all respects similar to that which I had previously observed. A corresponding muscle in the left side somewhat better developed, arose from fifth and sixth costal cartilages, by a broad, fleshy belly, and about half way between its origin and the top of the sternum, was inserted into the tendon of its fellow, thus making that the common tendon of both muscles. I made a preparation of this, which with the one previously made, were exhibited by Professor Elliot to the class of the medical department of the Georgetown College.

The two preparations were examined by the members of the faculty of the above-named school; also by Dr. Thomas Miller, Professor of Anatomy in the National Medical College, and by Dr. R. K. Stone, formerly Professor of Microscopic Anatomy and of Physiology in the same institution. Neither of these gentlemen had ever before seen anything of the kind, nor could any mention of it be found in Sharpey, Harrison, Horner, Wilson, Bichat, Cruveilhier, or other anatomical authors. It is proper to say, that both subjects were of the African race—the first, a negress of medium size and build, 30 to 35 years old—the second, a negro male of medium height and size, about 45 years of age.

By the advice of Dr. Stone, I showed the preparations to Dr. Baird, the accomplished naturalist of the Smithsonian institution, thinking there might be something similar in some of the lower animals, but he could not say that he had ever seen anything in the brute creation at all corresponding to it.

I am indebted to Dr. Stone for a handsome colored drawing of the preparation, as well as for much assistance in ascertaining the probable originality of the observation.—*Virginia Medical Journal*.

Death after Ligature of Varicose Veins of the Leg.—We are always anxious to give a prominent place to instances of ill consequences resulting from any of the minor operations usually deemed devoid of risk, since it is very desirable that the profession should be kept well informed respecting them. Ligature of the veins of the leg, when in a varicose state, has recently, in the hands of Messrs. Lee, Erichsen, Partridge, and Simon, been deemed to have almost passed into the category referred to, and has been largely performed, without our having had to record any instances of ill result ensuing. It has been thought that the modified plan of operating now adopted had relieved the procedure of all its danger. Nor are we at all certain that the case we now have to notice is properly to be ranked as a disappointment of these hopes. There are, however, very suspicious circumstances. Although there is no post-mortem evidence of phlebitis or of

pyæmic deposits, and although the death followed with such extreme rapidity on the first occurrence of alarming symptoms, and after a severe mental shock had been sustained, yet we have the awkward fact that rigors and vomiting were the first signals of danger. Such instances are, we suspect, not without parallel in the history of pyæmia; those, for instance, in which the patient dies right off in the first shock of the disease, without allowing time for any of the secondary and characteristic phenomena to be developed. Still we doubt not there will be differences of opinion as to the real cause of death in the following case, the brief note respecting which has been kindly supplied to us by the operator:

A woman, aged 44, was admitted on August 4th, into the Westminster Hospital, under the care of Mr. Hillman, on account of varicose veins of the leg, with chronic congestion and superficial ulceration of skin. She was subject to great mental anxiety, but apparently otherwise in good health. The veins were ligatured in four places by hare-lip pins, and over-lying pieces of bougie. The pins were removed on the thirteenth day. Four days after the removal of the pins, when all was going on well, her husband called, and exceedingly distressed her. Rigors and vomiting came on, and she died on the day following his visit.

At the autopsy, no deposition of serum or pus in any organ, or local mischief of any kind was to be detected.—*Ibid.*

Medication of the Respiratory Passages. (Académie de Médecine, Paris, August 25, 1857.) Translated by JAMES JONES, M. D.

Dr. Trousseau read a report on a memoir of Dr. Loiseau, entitled: *A simple and easy process whereby to penetrate into the respiratory passages in order to cauterize them*, to extract false membranes, to dilate the glottis, and to introduce all the pulverulent or liquid substances when not acceptable.

The reporter stated that the number of cures obtained through tracheotomy, had removed in late years the species of interdiction which was laid on that operation. Nevertheless, it did not prevail among the mass of physicians, and is only practised by a small number. The majority discountenance it either on account of its difficulty, or the insufficient proof of its utility.

After having seen many fatal cases of croup in which tracheotomy, although indicated, was not performed, Dr. Loiseau has conceived certain instruments and a practical method for penetrating into the larynx as we do into the pharynx. This invention dates from the year 1840.

Dr. Green, of New York, had already suggested to reach the interior of the larynx by a stiff whalebone with a curve terminated by a small sponge, of which the introduction was facilitated by a tongue-depressor, which in his hands was a good instrument. It forms a large spatula, concave beneath, with a horizontal part for the tongue and the handle at a right angle, it can be held without masking the interior of the mouth and thus completely exposes the epiglottis. Nevertheless, it is very difficult to penetrate between the aryteno-epiglottic folds with the end of the whalebone, by reason of their

spasmodic contraction, and even on the dead body we succeed only one time in four.

The process of Loiseau is more simple and it is infallible. He protects the base of the left forefinger by a metallic ring of about an inch in height, and introduces it rapidly and far back into the mouth, so that the ring is placed between the molar teeth and holds the jaws open. With the free extremity of the finger at the same time that he depresses the tongue, he seizes the epiglottis, raises it, and shoves the pulp of the index between the folds. Nothing is then easier than to slide a laryngeal tube along the finger, which tube is no other than Chaussier's. The escape of air from the end of the tube proves its entrance into the larynx. It only remains then to apply by means of this tube as a conductor, either the nitrate of silver or any other substance contained in a little cavity in the side of a flexible metallic rod. In substituting the forceps for the laryngeal tube, we can by a similar process extract foreign bodies which have slipped into the air passages.

In May, 1839, Dieffenbach having used the same method, employed in the identical style, in a case of croup, to him belongs the priority. The reporter believes that Loiseau was ignorant of this fact, which, not having been published, only came by accident to the knowledge of the committee.

In another part of his memoir, the author prefers the employment of tannin in membranous angina to the exclusion of cauterization, which treatment has met with uniform success in *in many hundred cases* observed by himself. Dr. Trousseau having recalled to mind that Areteus had already boasted of gall-nuts and tannin in the Egyptian and Syrian ulcers, which are nothing but diphtheritis, demanded if in some of his cases, Loiseau had not confounded membranous angina with that disease. He had seen Loiseau's practice succeed, but could not consent to abandon caustics.

As to Loiseau's operation, recommended previously by Reyband—which consists in leaving a canula permanently in the glottis—he condemns it as barbarous and impracticable.

In conclusion, he thinks that the method of catheterizing the larynx in this memoir of Loiseau, is a good substitute for tracheotomy, and ought in all cases to be used before this operation. He proposed, therefore, to thank the author and to publish his work.—*L'Union Médicale*, from *New Orleans Med. & Surg. Journal*.

Rupture of the Gall-Bladder. Reported to the Medical Society of the County of Albany, by S. H. FREEMAN, M. D., and communicated to the Boston Medical and Surgical Journal, by LEVI MOORE, M. D., Secretary.

The patient was a gentleman retired from business, of vigorous constitution, florid complexion, and 65 years of age. He had usually enjoyed good health and spirits, with the exception of occasional attacks of cardialgia and other minor symptoms of dyspepsia.

I was first called on the 15th of October, 1857, to visit Mr. K., who was supposed to be suffering from an ordinary attack of colic. Found him vomiting and suffering occasional paroxysms of spasmodic pain, which he referred to the pit of the stomach and to the region of the umbilicus. There

was no tumefaction of the bowels, nor tenderness on pressure. The tongue was slightly coated, brown, moist; pulse 80, full and regular. The vomiting and pain were soon relieved by the immediate administration of a dose of dilute chloric ether, followed by the exhibition of small doses of calomel and opium. He enjoyed a comfortable night, and the following morning had a free bilious evacuation from the bowels.

On my second visit the next day, at noon, I found him sitting in his easy chair, quite comfortable; and, indeed, he expressed himself "perfectly well." During the afternoon, however, he had a return of violent intestinal pain and vomiting, discharging with the contents of the stomach, about a pint of grumous blood, which was followed soon after by a copious bloody passage. He was, again, soon relieved, and had no return of farther unpleasant symptoms, with the exception of occasional paroxysms of pain, until a fortnight from the time of the first attack, when I was hastily summoned, at night, to visit him. I then found him in *articulo mortis*—the surface of his body was covered with cold perspiration, and though he conversed intelligently and calmly, his pulse, which the evening previous was perfectly normal, was now rapid, irregular and feeble; and in half an hour from the time I entered his room, he gently breathed his last.

Autopsy, fifty-six hours after death.

On opening the cavity of the abdomen, there appeared a mixture of sanguineous fluid and bile, amounting, by estimate, to three or four pints. On farther examination, *eleven* large biliary calculi (resembling chestnuts in size and shape) were found in the peritoneal cavity and in the gall-bladder. The gall-bladder was adherent to the duodenum and transverse colon. Its cavity was more than double the normal capacity, and its walls were much thickened. The *ductus choledochus communis* was greatly enlarged, and about midway between the fundus and the duct there was a free opening, about an inch and a half in diameter, through which the contents of the bladder had escaped into the cavity of the abdomen. The surrounding parietes were also much thickened, but presented no well-marked appearance of recent inflammation or ulceration. The other organs, with the exception of the liver, which presented the pathological condition of incipient cirrhosis, appeared healthy.

Remarks. This case derives especial interest from the obscurity of the diagnosis; and though I had inferred that the *liver* was probably the seat of the disease, the absence of tenderness and continued pain in the right hypochondrium and at the *scrobiculus cordis*, the want of an icteric tinge in the conjunctiva, and the regular bilious evacuations, seemed to preclude the possibility of an obstruction of the gall ducts, nor in any way determined the precise nature of the disease.—*Boston Med. & Surg. Journal.*

Obituary.—Died, at Dublin, on the 11th October, in the 52d year of his age, O'Brien Bellingham, M. D., Surgeon to the St. Vincent's Hospital, Dublin, and Secretary to the Surgical Society of Ireland. He was well known to the profession by his treatises on diseases of the heart, and on the cure of aneurism by compression.—*Med. News & Library.*

Case of Empyema of the left plural cavity treated by injection of iodine.

By DANIEL BRAINARD, M. D., Professor of Surgery in Rush Medical College, etc.; reported by Edwin Powell, M. D.

Thomas S. Bryan, aged 16, a native of Norway, first came under the care of Prof. Brainard, April 15, 1867, with empyema of the left plural cavity, the result of a wound.

The previous history of the case, as given by his friends, is as follows: Some five months since the patient received a stab in the left side, between the fifth and sixth ribs, just below the nipple, with a sharp-pointed knife, which was followed by difficulty of breathing, spitting of blood, etc. The external wound was closed with sutures and adhesive plaster, the patient was bled, purged and confined to a low diet. At the end of three weeks the wound had healed, and the patient was able to be about, but the difficulty of breathing had not entirely subsided, and he suffered more or less pain in that side.

He remained in this state for the space of two months, when a pretty copious discharge of matter took place from the wound, which had opened by ulceration. Since which time there has been a constant discharge of extremely foetid pus from the wound, and the patient was gradually becoming weaker and emaciated. The parents of the patient being in destitute circumstances, nothing was done for him during this time.

Present Condition.—The patient is now excessively thin; the skin presents a shrivelled and yellow appearance. There is a distinct bulging of the affected side, and one teacupful of fetid pus is discharged each day from the wound. The shoulder of the affected side is two inches lower than the other. He walks with the utmost caution, as the least jar or mis-step gives him great pain; in fact, he is scarcely able to walk from one room to another without assistance. He is also affected with loss of appetite, chills, night sweats and diarrhoea.

Treatment.—The opening was sufficiently enlarged to admit a gum elastic tube of four inches in length, of the size of a No. 9 catheter, through which the pleural sac was washed out, morning and evening, with the following solution:

℞ Iodinium, j gr.
Potassi Iodidum, iij gra.
Aqua Destillata, ℥i.

M. Ft. Sol.

The solution was thrown in with a strong syringe, and allowed to flow out again after remaining in for a few moments. If any smarting followed the operation, the cavity was washed out with cold water. The first effect of the iodine was to change the character of the discharge to nearly healthy pus, and afterwards to lessen the amount of suppuration. No bad symptoms at any time followed the use of the injection. Iodine could be detected in the urine. The patient was, in the meantime, placed upon as generous a diet as he could take, with the use of stimulants.

As he had a very intelligent friend to take charge of him, he was allowed to go into the country to his own home, and continue this course of treatment there, after having remained under observation for two weeks.

July 10th.—The patient returned to the office this morning from the country. It was surprising to see the improvement that had taken place; he has gained in flesh and strength quite rapidly. Suppuration is still going on, but not much, and the discharge is of a healthy character. The injections had been faithfully used while in the country. He was advised to pursue the same plan, and again returned to his home.

October 10th.—The patient again presented himself at the office, from the country. The suppuration had entirely ceased, and the external wound had healed soundly. Instead of the mere skeleton he was seven months ago, he now presents the appearance of a sound healthy boy.

I made a physical examination of his chest, this morning, and could detect no difference in the two sides.

I am not aware that injections of iodine have ever been used or recommended in this country in cases of empyema, heretofore, but such beneficial results followed their use in this case, that I think we should be justified in resorting to them in similar cases.—*North-Western Med. and Surg. Jour.*

Transmission of the Virus of Grease from the Horse to Man.—Drs. Maunoury and Pichot have published an interesting series of experiments, tending to prove the identity of grease and cowpox. This doctrine, which was always maintained by Jenner, has received confirmation from the observations of Loy, Godine and others.

The following is a summary of the facts related by Drs. Maunoury and Pichot. François Barthélemy B——, aged twenty-eight, of lymphatic temperament, a farrier, presented himself to Dr. Pichot on the 5th of March, 1856. He had not been vaccinated. On the backs of his hands, which were red and swollen, were several confluent opaline pustules, depressed in their centre, having all the appearance of vaccine pustules of the eighth or ninth day. The inflammation, with which the pustules were surrounded, had appeared on the second, the pustules themselves preceded the inflammation some days. This man had not been in contact with any cow, but on the 11th of February he had shod a horse suffering from grease. There existed, at the time, numerous cracks about his hands. The disease from which the horse was suffering was certified by a qualified veterinarian. Various inoculations were practised with the liquid taken from the pustules presented by B——, with the effect of reproducing the same disease. The most perfect set of experiments were made by M. Maunoury, who transmitted the virus through four sets of cases. The following are the results of his observations:—

1. That virus obtained from the hands of the farrier B——, and inoculated on the arm of an infant, produced a full pustule, having all the characters of a vaccine pustule—form, evolution, termination.

2. That lymph taken from this pustule, and inoculated on the arms of three persons, had produced identical pustules, which are truly vaccine.

3. That the transmission of the virus by successive generations, has not

diminished the intensity of the force of the poison. One of the set of cases presented large pustules, depressed in the centre, and filled with matter; each pustule served for several inoculations, and the charging of several sets of glassea.

4. That from these facts it is evident that the virus taken from the pustules of the farrier, was identical with the vaccine.—*Archives Générales de Médecine*, April, 1857, pp. 365, 398, from the *Brit. & For. Med. Chi. Rev.*

Extirpation of the Supra-Renal Capsules, Spleen and Thyroid Gland, from living Animals.—M. Philipeaux addressed a note to the Academy of Sciences, in which he says that he has succeeded, not only in removing the supra-renal capsules, but also the spleen and thyroid body in two white rats (*Mus Rattus*,) aged one month. By an operation of the kind described in my first note, I have removed first the right supra-renal capsule, and in ten minutes afterwards the left. These animals in about one month were completely recovered, when I proceeded to remove the spleen through a small opening in the side of the abdomen, after which the wound was closed by a single suture. It was but a short time until they had again completely recovered, and I was successful in removing from the same animals the thyroid gland through a longitudinal section in the anterior part of the neck, on a level with the tracheal artery. At this time these animals, aged three months, are in excellent health, notwithstanding they have been despoiled of their supra-renal capsules for sixty-seven, the spleen for twenty-six, and the thyroid body seven days. I take this opportunity of informing the Academy also, that I possess one male rat, living in fine condition, which has been for four months deprived of his supra-renal capsules, and a female for forty-three days, without any modification of their functions that can be perceived. The female has been impregnated, borne eight young ones, and is raising them.

These experiments prove still more thoroughly the truth of my former conclusions, (viz., that animals can live without the supra-renal capsule.—*Trans.*) I adjoin to these, that they can live after being deprived at the same time of the supra-renal capsule, the spleen and the thyroid body, and that consequently none of these (non essential bodies) are required to, or can supplementarily discharge the function of the other.—*Gaz. des Hos.*, from *The American Med. Gaz.*

Congenital Absence of the Supra-Renal Capsules.—M. Martone addressed a description, accompanied with a drawing, of a malformation which came under his observation, in which there was a fusion of both kidneys, they forming but one body, with a congenital absence of the supra-renal capsules.—*Gaz. des Hos.*, from *The American Med. Gaz.*

Symptoms of Poisoning produced by Ergot.—The following case occurred to M. Triastour: A woman of lymphatic temperament, and very fat, had profuse uterine hæmorrhage after delivery of a still-born foetus at eight months. Three grammes (forty-five grains) of ergot were given in six doses in the course of an hour; cold applications were also made to the abdomen and thighs. The hæmorrhage was checked and the uterus contracted, but in a few hours there were severe symptoms of disturbance of the circulation. The patient rolled constantly from one side to the other; her face was pale, her lips a little blue. The pulse in the radial and brachial arteries was imperceptible; the heart-beat was regular, not increased in frequency, but weak. The patient complained of prickling sensations, and of cold in her hands and feet; she said that she no longer felt her limbs. The extremities were really cold to the touch; the skin and nails had a blue tint, both in the hands and feet; intellect was clear. These symptoms were combated by the alternate administration of broth and wine, then by some spoonfuls of opiate syrup given every two hours. All the alarming symptoms had disappeared in three days; convalescence was tedious, but perfect recovery took place.—*Journal de la Section de Médecine de la Loire-Inférieure*, and *Gazette Médicale de Paris*, July 25th, 1857, from the *Brit. and For. Med. Chi. Rev.*

Salt not a Necessary of Life.—That salt performs an important office in sanguification, and is regarded by physiologists as a necessary article in our dietary, is well known. It is therefore in use among all nations, from the savage to the most civilized and enlightened people. There are, however, a few members of the whole human race to whom the use of table salt is unknown, among whom may be named the inhabitants of Mauritius and the Patagonian Pampas of America (Faerichs). I have, says M. Gatton, recently learned of another tribe who never eat salt. It is the Damaras of tropical South Africa. In their country there is no salt. In Europe it is universally believed that salt is indispensable to life, but M. Gatton in the country of Damaras saw this proven to be a fallacy. He made a journey with eleven other men on horse-back of six weeks' duration, with only a pill-box full of salt. The whole of them used no more than this. They eat nothing but flesh, and drank coffee alone. There can be no doubt that people who live on flesh and milk need much less salt than those whose sole nourishment is derived from the vegetable kingdom. The half of the people of Damara eat nothing but pig-nuts, the most meagre and indigestible of nourishment, and which must be taken in very large quantities to afford subsistence enough. The Hottentots of Wallfish Bay, who live almost entirely on squashes, with the sea on one side and salt springs on the other, take no pains to collect salt for use, which they certainly would do if they experienced the same need of it as the Europeans. Wild animals in Swakop, according to Gatton, do not frequent salt licks like they do in America. He visited these places, and although the tracks of wild animals were abundant, they were a month old, and indicated that they were passing without coming near enough the salt rocks to lick them. He mentions tribes also that not only eat their food without salt, but actually loathe it.—*Allg. Med. Cent. Zeitung*, from *The American Med. Gaz.*

On Bleeding from the Ear as a Consequence of Injury done to the Chin.
By M. MORVAN. (Archives Générales, cinquième série, tome viii, pp. 653-654.)

Bleeding from the ear as a consequence of *contre-coup* has been accepted by surgeons as an almost certain indication of fracture of the base of the cranium. M. Morvan has, however, met with two cases in which injury to the chin gave rise to this phenomenon. The subject of the first of these, was a robust lad, five years of age, who had, five or six hours before the author's arrival, fallen on his face on the pavement from a height of several feet. Immediately after the fall, a large flow of blood took place from the right ear, this being continued, when M. Morvan saw him, only in occasional drops, in which condition it lasted for three days longer. No fracture or dislocation of the jaw could be detected, and the membrana tympani was not ruptured. The child suffered much from pain in front of the right ear, from attempts at deglutition, and, from any movement of the jaw.

In the second case, a very strong man, aged forty-seven, received a kick from a horse on the chin, which almost deprived him of consciousness, and gave rise to an abundant jet of blood from the right ear. No fracture or dislocation could be found, but deglutition was excessively difficult. Prompt depletion dissipated the cerebral symptoms, and all went on well, a considerable amount of deafness remaining in the right ear. The membrana tympani was uninjured.

On searching, the author has been able to find only three analogous cases, and these only meagrely detailed, making thus, with his own, five cases. In three of these the blow on the chin resulted from a fall, and in two was produced by a kick from a horse. In three, the bleeding took place from one ear, and in two from both ears. In the author's cases the force acted obliquely, and the bleeding occurred on the opposite side to that of the point of contact. When bleeding has occurred from both ears, the blow has been central. In one only of the five cases, did fracture of the jaw occur. In order to produce bleeding by this form of *contre-coup*, it is probably necessary that the shock should be entirely transmitted to the articulation of the jaw, while when fracture takes place, its force is usually exhausted in the production of the lesion of the bone.

In the three cases in which the point has been noted, the difficulty of deglutition and mastication has been excessive at first, and has continued for a long period; and M. Morvan suggests that the lesion which gives rise to this symptom, as well as the bleeding from the ear, is a fracture across the glenoid cavity, which explains the occurrence of the abundant hæmorrhage, the membrana tympani remaining entire. Some experiments he has made in the dead body, by inflicting blows upon the chin, have failed to produce this form of fracture, but have induced fracture of the base. Thus no doubt can exist that this description of *contre-coup* may also produce fracture of the base, with bleeding from the ear, and rupture of the membrana tympani, but when we meet with such bleeding as a consequence of violence done to the chin, and without rupture of the membrane, the hæmorrhage may be regarded as a far less dangerous symptom.—*British and Foreign Medico-Chirurgical Review.*

On Pepsin, and its Chemical and Physiological Properties. (Bulletin de Thérapeutique, January, 1857)

In an analysis of a paper read lately by M. Boudault, to the Société de Pharmacie, of Paris, the author, after discussing the general properties of pepsin, proceeds to make the following remarks upon that substance employed as a medicine:

Its administration presents some rather considerable difficulties, in consequence of its liability to alteration when the vessel which contains it has been open. Besides this, its origin, its viscosity, and its disagreeable smell were so many motives for disliking it on the part of the patient. It was necessary, then, to find a method of transforming it without injuring its medical action. It was to be feared, in associating it with an inert substance, that the latter would experience a kind of digestion, or would act upon the pepsin as a ferment. It was necessary, besides, that this substance should be sufficiently hygrometric to absorb the humidity of the pepsin, and not to attract, in addition, the humidity of the air. Sugar was one of the substances with which it appeared most easy to associate pepsin; but at the end of some days the cane-sugar is transformed, under its influence, into glucose, and afterwards into lactic acid, for here the pepsin acts as a true ferment. Starch dried at 100 degrees (Cent.) has given to M. Boudault the most favorable results. Starch, which has the property of not injuring the digestion, forms with pepsin a pulverulent matter, the odor of which is very weak, and the taste partly disguised. This powder is preserved very well in well-stopped bottles, and time does not modify in any way its physiological properties. Under this form, pepsin may be mixed with a number of medicinal substances which do not at all modify its therapeutic action; thus, with hydrochlorate of morphia, to relieve violent pains of the stomach; with strychnine, to stimulate the peristaltic movements of this organ; with nitrate of bismuth, lactate of iron, carbonate of iron, iodide of iron, and other similar preparations. It is very efficacious in dyspepsia, and in all cases of difficult digestion which generally follow the convalescence from serious or chronic diseases; and it has been found a powerful digestive agent in cases of consumption caused by insufficient food. Pepsin is administered in the first spoonful of soup, or even before meals, wrapped up in a wafer; and precaution must be taken not to eat immediately afterwards food which is at a higher temperature than 45 deg., for then the digestive properties of pepsin would be destroyed. It is employed in the acid or in the neutral state. In the acid state it takes the place of the gastric juice, when the latter is not formed in sufficient quantity in certain morbid affections; in the neutral state—that is to say, feebly acidulated—in cases where the stomach contains too great a quantity of acid. It may be shown that chemical or artificial pepsin may very well take the place of the gastric juice, and may be considered among one of our most heroic remedies.—*Ibid.*

EDITORIAL DEPARTMENT.

The undersigned, Committee of American Medical Association on Influence of Marriages of Consanguinity upon Offspring, solicits aid from every part of the Union in collecting facts upon this interesting subject.

The points of information more especially desired, are:

1st. The degree of consanguinity of parties, and whether by father or mother's side.

(As first, second, third or fourth cousins, or more rarely brother and sister or uncle and niece.)

2d. The approximate date of marriage.

(This is only requisite in order to show whether the fruitful period is past and the case complete as to its results.

3d. The constitutional diathesis and temperament of *each* parent, their occupation and such habits or circumstances as are, in the opinion of the observer, calculated to influence the normal development of offspring.

(Where the parties are personally known, the color of the hair and eyes and complexion are requested to be noted.)

4th. The number, sex and *condition* of children produced by such marriages.

5th. The number and sex of children who have died, their ages at death and causes, where known.

It is probable that in very many cases all the points of information required above cannot be obtained; it is hoped that those who favor the purposes of the report, will not suffer an inability to procure *all* the facts to deter them from furnishing such as are within their reach. The committee desires to accumulate a mass of statistical truths, whose aggregate will deter-

mine beyond question, whether marriages of consanguinity are in the main prejudicial to offspring or not; that he may accomplish his purpose, he begs of his co-laborers to report all instances of such marriage within their circles of observation, whatever their results: whether sterile, or followed by well-developed or imperfect issue.

Contributions are requested to be forwarded as early as practicable, but will be accepted until the first of April next.

(N. B. Names of parties not desired, as all personal allusion will be avoided by which either contributors or their subjects of observation may be designated.)

S. M. BEMIAS, M. D.

LOUISVILLE, Ky.

We publish the preceding which we received from Dr. Bemias, hoping that those of the profession who have it in their power will respond promptly to the call.

P.

"Is the effusion of blood from the ear a pathognomonic sign of fracture of the base of the cranium?"

In the report of the proceedings of the Buffalo Medical Association, reported in the October number of your journal, I find the above question asked by Dr. Lemon. As the minutes of three cases of effusion are now at hand which have fallen under my observation, I will give them that they may contribute something to settle the question.

CASE I. Dr. S., æt. 50, was thrown from his carriage in August, 1857; I saw him one half hour after the injury. Says he was thrown some distance and struck upon the right side of his head, face and shoulder. I found the integument over the right os frontis much bruised, extending to the eye and side of the face. The shoulder was badly sprained. There was *hemorrhage from the ear* for some three hours after the injury. Reaction was established in about three hours from the time of the injury. His recovery was rapid, without coma, or a symptom of effusion or compression.

CASE II. P. McC., æt. about 40, while engaged in an Irish fight, in Aug., 1857, was struck a blow, over the right os frontis, with a large piece of wood; as he reached the ground, the back side of his head came in collision with a bar of iron on the railroad track. When first seen he was partially comatose. He remained in this condition about one hour. There were no symptoms of osseous fracture, yet there was quite profuse *hemor-*

rhage from the ear for one hour. He was at his work again in two days, feeling as well as ever, save a "sore head."

CASE III. P. M., *æt.* 30, was knocked down in a street fight, in Sept., 1857, and severely beaten about the head by his assailants, with their fists and boots, until he was unconscious. When first seen he presented all the appearances of having received a severe shock. Smart reaction took place in one hour.

There was *hamorrhage from both ears*, though not to any great extent, nor of so long continuance as in the preceding case. On the third day after the date of injury he was about town at his usual work.

In all these cases I made a careful examination to find injuries of the ear, but in neither case could I detect any. The hæmorrhage seemed to proceed from internal vessels.

Yours, &c.,

BELoit, Wis., Nov. 9th, 1857.

H. P. Strong.

The following communication we publish verbatim et literatim, hoping that it may find an owner, or if not, that some of our readers will give the writer the benefit of his judgment in the treatment of his case, which is utterly beyond our comprehension. The direction is sufficiently plain, but our worthy senior editor disclaims all connection or relation with it. If there be any other Dr. Hunt who has claims to this epistle, he can have the original by "proving property and paying charges."

r.

The letter is plainly directed to

Mr. Dr. Hunt, Buffellow, Buffellow, Newyork.

Delaware October the 15 1857

Dear Sir

I take this oppetunity to wite to you that we have given your meicin a triel and it proves to no Efect, the girle took all her medicen and it maid her faces worse and the medicen you left for my wife she took one or two pouders and was obtige to stop takaig them; and the surip the Drugest said that the Chips you Recomendod to be put in the sirep that it would not answer to take for meicen therefore we Did not make Eny.

they took sum of your sasafrella and it Didnot Do Eny good; and there-

four I Canot pay For nothing and more than that I am not able fore the
Reason that the hale storme Dissstroyed most all my Crop

Your Respectfly &c

REUBEN LITTICK.

KEENE, N. H., Oct. 16th, 1857.

DEAR SIR,

I was reading the proceedings of the Buffalo Medical Association in your very interesting Journal, (received yesterday,) I observed that in the long enumeration of indigestible articles swallowed, the gentlemen reporting them have overlooked an interesting collection of such cases described in J. B. S. Jackson's catalogue of the Cabinet of the Med. Improv't Soc. of Boston. you have a copy of that catalogue, you will find them Nos. 527 to 533, and including a penknife (open), silver pencil case, pieces of glass, nails, cotton, pieces of blanket, etc., the most of them by lunatica. The most remarkable, I think, that I ever heard of, is one of these, a piece of blanket $2\frac{1}{2}$ feet long by 4 to 10 inches wide,—an article that it seems almost impossible to swallow. The glass, some of it in large pieces and irregular, caused no unpleasant symptoms—which renders the results of Spallanzani's experiments with fowls less remarkable, or rather which equals the strangeness of those.

* * * * *

Respectfully yours,

WM. HENRY THAYER.

S. B. HUNT, M. D.

Use of Chloroform in Retention of Urine.—An intemperate cabman, aged 52, was admitted into a medical ward at Guy's, a few days ago, on account of chest symptoms. It appeared that he had had gonorrhoea twelve years before, and had ever since had more or less difficulty in passing his water. After having been in the hospital nearly three weeks, he was seized with retention of urine. The dressers and house surgeon made patient and repeated attempts to pass a catheter, but without result. There was little doubt that the stricture was a permanent one, which had been closed by inflammation. In February the retention had become complete for two days; the symptoms were becoming very urgent, and Mr. Cooper Forster was accordingly called to see him. Opium had been most freely given. Having

failed in persevering attempts to introduce a new No. 2 catheter, Mr. Forster determined to administer chloroform, and, if needful, puncture the bladder by the rectum. When completely insensible, another trial was made with a No. 3, which now passed most readily. We cite this case as important, because it proves beyond dispute, the influence of the anæsthetic state in relaxing an otherwise impermeable stricture. An opiate treatment had been fairly tried before, and had failed, and the catheter had also been found useless in the hands of several well-practiced surgeons. The plan of administering chloroform in cases of obstinate stricture and retention, is one in wide use, both in hospital and private practice; but, as it is not yet in such general favor as it deserves to be, we have thought that so pointed an example of its advantages might be worth bringing before our readers.—*Medical Times & Gaz.*

We add to the above the history of a case which was kindly furnished us by Prof. Hamilton, which very nearly resembles the above, and which seems to show that the difficulty of passing an instrument, often attributed to inflammation and consequent swelling of the parts, is really due to spasm, as in Dr. Hamilton's case, "at the moment of the most extreme prostration the instrument fell into the bladder by its own weight." F.

"George Williams, brakeman, State Line R. R., was severely injured in a collision, Oct. 8th, (Thursday); on the 9th Dr. Hamilton was able to introduce a catheter to relieve his bladder, but on the morning of the 10th, he could not, owing to the swelling in the perineum and spasm in the urethra. Repeated and prolonged attempts were made on the 10th and 11th, and on the morning of the 12th, at the suggestion of Dr. Flint, chloroform was administered until complete anæsthesia was produced, and at the moment of the most extreme prostration the instrument fell into the bladder by its own weight. He had retained his urine sixty hours."

Pulmonary Epithelium.—In the July number of the British and Foreign Medico-Chirurgical Review, we notice an article by Dr. C. Radclyffe Hall, on the epithelium of the air vesicles of the human lung.

Some of our readers may recollect a paper by Dr. Hall in the last October number of the Review, in which he states that in chronic pulmonary consumption, "fatty atrophy of the epithelium of the air vesicles is antecedent to the formation of tubercle; in the same number

we have a paper by Mr. Rainey, against the existence of epithelium in the air vesicles. This paper by Dr. Hall assumes to demonstrate these epithelial cells, and is illustrated by wood cuts of their microscopic appearance as seen by Dr. Hall and Dr. Brittan. Assuming that these illustrations are correct, and we have no reason to doubt it, there seems no doubt but that epithelial cells can be demonstrated in the human lungs, and the lungs of the mammalia. We cannot but agree with Dr. Hall, that on a question of relative authority, "the positive evidences of one trustworthy observer is usually allowed to over-rule the negative evidence of many." An examination of this article by Dr. Hall, with the drawing of the microscopic appearances by Dr. Brittan, will not fail to convince any one of the existence of epithelium in this situation. If this were not the fact, the statement of Dr. Hall that fatty degeneration of the epithelium of the air cells preceded the deposition of tubercle, (an observation which we conceive to be of value, and which we hope may be further elaborated) would of course be entirely without foundation.

F.

The opening of our Medical Schools.—However far we may be removed from the influence of medical schools, we must always feel an interest in the educational progress of our profession, and we cannot but look back with respect and veneration upon the college which sent us out to minister to the ills and sufferings of humanity, and watch with peculiar interest the progress of the institution of which we have such cheerful remembrances. With some of our readers, the time which is to be passed over in our retrospective musings is a lifetime in itself; years of toil and hardship, filled with the recollection of the painful scenes, the peculiar annoyances and mortifications which fall to the lot of every practitioner, but at the same time studded with bright spots, the enviable satisfaction which all must experience in having done good; and sometimes smoothed by the grateful consideration and respect which our office among men occasionally awakens. It is impossible to pass over this period, and to look back on our old college days with other feelings than those of pleasure and satisfaction. Some have realized the fond hopes and aspirations which were called out by the contemplation of the deeds of great men in our ranks, and the study of the character of eminent teachers of our own country, with whom it has been their good fortune to hold the intimate relation of pupil and instructor; while all have become useful members of society, and if they have not made their light shine

before all men, they have the consciousness of having done at least their portion of good, no matter how limited the sphere to which their labors have been confined.

In spite of the hard times, the ranks of the profession have nowhere been very much thinned, and in some of our larger institutions, have been somewhat swelled by the access of medical students. The Jefferson school of Philadelphia, which for some years has stood at the head of the list as regards numbers, has even a larger class the present session than it had the year before; the venerable University of Penn. has, we believe, a good class, though falling somewhat short of last year. About the remaining Philadelphia schools we have not heard any definite report, but we conclude that they are in a fair way. The New York colleges are somewhat thinner in classes than they were a year ago, but still are doing well, and the able corps of medical teachers which has congregated in the great metropolis, is hard at work in the schools and hospitals, helping the student to avail himself of the advantages which that great city has at its disposal. The calamity which overtook the Louisville University, has made no break in its order of teaching, the faculty having already replaced the old edifice which was destroyed by fire last year, by a new one of even greater convenience.

Judging of the state of the smaller schools by the Buffalo Medical College, they are not behind the past year in prosperity. The Buffalo school is unfortunately situated for large classes; a great many of the students who properly belong here, disappear into the capacious maw of Philadelphia, or are tempted by the inducements which are presented by a great city like New York. On the other side, we have the free school of Ann Arbor, which diminishes somewhat the number, but which we conceive rather winnows from us the chaff, (though the chaff's money is as good as any other,) but leaves us still a good class of intelligent and earnest men. The Buffalo Medical College has always preserved its integrity; the fees for lectures have not been diminished, and with its able and zealous faculty will at all times command a good class. The number of students will probably be about the same as last year; the term opened as usual on the first of November, under favorable auspices, and the hospital clinic has thus far been unusually replete with interesting medical and surgical cases, some of which have been exceedingly rare and instructive. The introductory was delivered by Prof. Flint, who presented some of the favorable aspects of the profession of Medicine; it was an able and interesting discourse, and was listened to with marked attention by the class and quite a number of citizens. r.

*“Professional Honor;—*Not that *reflected* honor which our profession has been so free to lavish, even upon the unworthy, but that which has given character and perpetuity to medical science. In this we find the text for a few observations.

“The practitioner of medicine, who has acquired the confidence of community, sustains a relation to society which cannot be secured by any other accomplishment. He is not only entrusted with the life of his fellows, but obtains a passport which freely admits him to the innermost apartments of *home*, where he is even permitted to hold the secrets and share the sympathies of the heart. What bond of security has he given for these chartered rights and privileges? His *honor*, endorsed by the profession as a whole, and this ought to be sufficient. But, alas! poor human nature too often finds in *our* profession melancholy examples of its infirmities. Neither great acquirements, the vows of religion, nor honorable position, always afford undoubted assurance against the violation and forfeiture of the sacred trust. Even carnal lust has invaded the sanctity of home, under the guise of professional honor, prostituting the highest prerogative to the gratification of sensual desires. If we may judge from numerous individual instances, there seems to be a prevalent disposition to lay aside moral character, to ignore the code of medical ethics, to advertise medical talent and acquirement, to loan professional honor for the ends of justice, and even to become a party to crime for a paltry consideration. The editor of the *American Medical Monthly* tells us in the September number, that ‘there would have been no difficulty in obtaining the services of a doctor, who, for a thousand dollars or less, would have done all that Dr. Uhl was asked to do.’

“However reluctantly we may admit the truth of this remark, it is, indeed, a humiliating commentary upon the honor of our profession.

“What has aroused the attention of the medical public to the subject of ‘criminal abortion,’ urging it upon the attention of the State Medical Societies, calling forth fervent and lengthy editorials from the medical press? What is it, but the facility and readiness with which medical men have permitted themselves to be persuaded from the legitimate path of *professional duty and professional honor*? It has even been said that our statutes, which were designed to recognize and punish this infamous crime, have been rendered null and void by the apparent sanction of respectable medical men.

“Is it not time, then, for even the respectable members of the profession, to consider whether they are not entertaining loose opinions upon this subject, whether their influence towards the suppression of the evil is not at

least negative. Popular opinion upon the subject of infanticide at the present time more fitly belongs to an age of barbarism.

"The destruction of foetal life before the time of quickening, seems not to be regarded as a criminal offence, either in the sight of God or man. Hence the enormous sale of nostrums *that 'must not be taken in the early months of pregnancy.'* Hence, too, the numerous applications and entreaties which every physician has, to violate physiological, civil and moral law, by the sacrifice of embryonic life. These ought to be startling truths, and sufficient to prompt every respectable member of our profession to consider the obligation which he owes to community and his own honor, and to labor with zeal to correct this morbid public sentiment.

"The *character* of the medical profession, in every community, is just what medical men choose to make it. If they are true to its highest interests, and worthy of its mission, they will ever preserve its honor. R."

We copy the above from the Medical Independent; it is one of a number of like articles which we have noticed in the editorial columns of our exchanges, and we earnestly hope that the universal sentiment of the periodical medical press may extend to the daily journals. Upon this point at least, all the conflicting sentiments of the profession must unite, and the monstrous advertisements which we can see in almost every daily paper, of "*Female pills which must not be taken in the early months of pregnancy, as they are sure to produce abortion,*" must be looked upon with horror by every man. We do not know whether these villains evade the letter of the law by such a circumlocution, but we hope that the matter may soon be decided by our tribunals, and such men be made an example of. In the mean time we cannot but think that it is the solemn duty of every physician to refuse countenance and patronage to every druggist who lends himself to such black and wholesale iniquity. R.

Meeting of the Medical Society of South-Western New York.—One of the occasions which makes one oblivious to the ills of one's self and the rest of mankind, and which is particularly refreshing at the present time, occurred at Fredonia in the shape of the medical dinner of the Medical Society of South-Western New York; the report comes to us in the Fredonia Censor. The president, Dr. G. W. Hazeltine, welcomed the members and their guests in an appropriate speech, which he concluded with the sentiment,

The Medical Society of South-Western New York; may it long continue to be what it now is, the pride of those who are worthy to be its members. This was responded to, in an appropriate manner, by Dr. T. D. Strong, of Westfield. Many other sentiments were proposed, which were well responded to, and among them "The Physician a Hero." We should like to make the acquaintance of Dr. H. M. T. Smith, of Dunkirk, who responded to this toast, for there must be some more left of the genial humor which effervesces in the first part of the Dr.'s speech. He establishes conclusively the connection between real heroism and a hearty dinner, (may he never want one) and brought forward the apt example of "the war between the beef eaters and the rice eaters." "John Bull," he says, "glories in good, sound, hearty roast beef. On a full stomach of his favorite diet, he will put to flight thousands of your poor, hatchet-faced, white-livered barbarians. Gentlemen, I predict that beef will win." The doctors had a good time, and left in good time, banishing, undoubtedly, all visions of troublesome patients and no pay, long midnight rides, etc., etc.

F.

Compound Dislocation of the Long Bones considered with especial reference to the value of Resections. By FRANK HASTINGS HAMILTON, M. D., Prof. of Surgery in the Med. Department of the University of Buffalo.

The paper before us appeared in the last number of the American Journal, and was undoubtedly perused with interest by those of our readers who subscribe to that stately periodical. The prognosis of fractures and dislocations has of late years occupied the attention of the author, who, with true philanthropic zeal, has made an elaborate report on this subject to the American Medical Association. This paper treats of the subject of compound dislocations briefly and with the author's well known clearness and decision, considering the subject especially in relation to the treatment by resection and reduction. The great objection to reduction with resection in opposition to simple reduction, is the shortening of the limb; but in the report to the American Med. Association, the author has shown that shortening of a limb to the extent of one-half or three-quarters of an inch, often fails to produce a halt in the gait. A universal appreciation of this fact would, we conceive, make the practice of reduction with resection, much more common than it is at present.

F.

Report of an Operation for Removing a Foreign Body from beneath the Heart. By E. S. COOPER, A. M., M. D., of San Francisco.

If we mistake not, this is the report of a case which went the rounds of the newspapers some weeks ago; it now appears in an authentic form before the profession. The patient had received a breach-pin in the chest, which accident resulted from the bursting of an old gun; he was brought to Dr. Cooper seventy-four days after the accident, in a condition of extreme prostration, discharging copiously from the wound in the thorax, and subject to fits of suffocation so severe as to endanger life. With the patient's full consent to the desperate alternative, and in the presence of a number of distinguished medical men, Dr. Cooper, after removing large portions of carious ribs, and searching for more than three-quarters of an hour, succeeding in removing the foreign body from beneath the heart, on the vertebral column just to the right of the descending aorta. From this operation the patient has now recovered.

This is certainly one of the most remarkable and daring exploits of modern surgery, and though in many, if not most similar cases, the patient would not be likely to recover, yet this shows that in a young man, under favorable circumstances, even such desperate efforts as this, may be crowned with success. This case will remain a lasting monument to the skill and daring of Dr. Cooper.

F.

General Therapeutics and Materia Medica, adapted for a Medical Text-Book, with Index of Remedies, and of Diseases and their Remedies. By ROBLEY DUNGLISON, M. D., LL. D., Prof. of Medicine, etc., in the Jefferson Medical College, etc., etc. Sixth edition, revised and improved.

The numerous text-books of Prof. Dunglison have all been received with the greatest favor by the profession. The work which we have before us passed to its sixth edition; a ninth edition of Medical Dictionary has lately been issued, his New Remedies and Human Physiology, have respectively passed to the seventh and eighth editions, and his work on Practice of Medicine, though a new edition has not been issued for many years, is still an admirable guide to diagnosis and practice. These, with numerous other publications, have gained for their author a world-wide reputation as one of the most learned and accomplished men who has ever graced our ranks;

and one whose assiduous labors as a teacher and writer have been most useful to practitioner and student.

The work before us needs no comment, it has been too long the standard text-book on *Materia Medica* in most of our colleges, and we know of no treatise which is so admirably adapted to the wants of the medical student, for whom it is especially intended.

r.

The Practice of Surgery. By JAMES MILLER, F. R. S. C., F. R. C. S. E., etc., etc. Revised by the American Editor. Fourth American from the last Edinburgh Edition.

We see by the publisher's notice, that the present edition was superintended by a professional gentleman of Philadelphia, owing to the absence of Dr. Sargent in Europe. The American editor, however, made use of Dr. Sargent's notes in its preparation.

This is indeed an admirable work, and such an one as we ought to have from some of our American surgeons. There is a deficiency still in our national surgical literature, which we hope and expect will be filled by Prof. Gross, whose work on surgery is rapidly advancing. It is true that one of our countrymen has lately published a system of surgery, but the medical press has pretty well decided how far that work goes to fill up the hiatus. We are still compelled to use works by foreign authors in this department, among which Miller's Surgery ranks high.

The present work really forms a second volume to Miller's Principles, they together forming a complete system of surgery.

r.

The Physicians' Diary for 1858. Buffalo: Phinney & Co., Publishers.

We suppose that there are few of our readers in the city who have not made use of the Diary which we have before us; a visiting list has now become indispensable to every physician, and here we have, in a form even more compact than the mere visiting list of Lindsay & Blakiston, the addition of a medical and obstetrical record sufficiently complete for all practical purposes, namely, columns opposite the name of each patient, for the name of the disease, termination, and remarks; and in the obstetrical record, col-

umns for the presentation (a list of abbreviations being found in the preface) the number of pregnancy, age, sex of child, hours in labor, and description of labor, whether artificial or natural. We mention all these particulars, for from the small and convenient size of this little Diary, one would not expect to find so much space for notes and records. In addition to this, we have space for nurses' addresses, poisons and their antidotes, etc. Though it is often desirable to make a more comprehensive record of cases than it is possible to make in this diary, yet the points which we would notice here, would materially assist in making out a fuller history, and many cases would be sufficiently described, which would otherwise pass with no record at all.

We would cordially recommend this companion to every practitioner of medicine, either in the city or county, believing it to be the best form for a diary which could be adopted. r.

Manual of Physiology. By WILLIAM SENHOUSE KIRKES, M. D., Fellow of the Royal College of Physicians; Assistant Physician to, and Lecturer on Botany and Vegetable Physiology at, St. Bartholomew's Hospital. A new and revised American, from the last London edition, with two hundred illustrations. Philadelphia: Blanchard & Lea. 1857.

We received this work some months since, but have inadvertently omitted to notice it. It has been so long familiarly and favorably known to the profession, that it is unnecessary for us to further point out its merits. It has always been one of the most useful and convenient handbooks to the student, which we have in any department. This volume is considerably enlarged, and is published in the handsome style which characterizes all books coming from the house of Blanchard & Lea. r.

On Diseases of the Skin. By ERASMUS WILSON, F. R. S. Fourth American, from the fourth and enlarged London edition. Blanchard & Lea. 1857.

The present edition of Wilson on the Skin, is far more complete than any of the preceding, the author having added several entire chapters and elaborated extensively, many points which have not been sufficiently prominent in the preceding editions. The new system of classification, which has now been adopted, adds materially to the usefulness of the volume. We

have also an appendix of selected formulæ, consisting of prescriptions which have been found valuable in the therapeutics of skin affections. This edition, then, commends itself even more than the preceding, to the profession as an elaborate and complete treatise on the subject. F.

Statue of Bichat.—The inauguration of the statute of the celebrated anatomist, and physiologist, Bichat, took place in Paris, on July 17th, with great *eclat*. The Minister of Public Instruction presided; and speeches, eulogistic of the life and labors of Bichat, were delivered by the President, by M. Amedee Latour, Baron Larrey, M. Serres, and M. Paul Dubois. The statue, which is in bronze, is the work of the celebrated sculptor, David. Bichat is represented, in the costume of the time of the consulate, standing in an attitude of meditation. His arms are folded across his chest. The right hand holds a pen; from the left falls a roll, on which are written the names of his great works—*De la Vie et de la Mort*, and *Anatomie Générale*. At his feet, and behind, lies, half covered, a subject prepared for dissection. The pedestal of marble on which the statue rests, bears the following simple inscription: "A. Xavier Bichat: le Congrès Médical de France de 1845."—*Charleston Med. Journal*.

Sit tibi terra levis!—The late John E. Thayer, of Boston, among other liberal provisions of his will, has bequeathed to the venerable Dr. Jas. Jackson, the medical attendant of the family of the deceased for two generations, one thousand dollars a year during his life, to be continued to Mrs. Jackson if she survives her husband. It is also ordered that the first payment of this annuity shall be made in ten days after the will is proven. The intelligence of this bequest was imparted to "the good physician" on his eightieth birth day. "We feel sure," says the Boston Transcript, "that no remembrance was ever made, that will give more general and cordial satisfaction in the community;" and, we may add, in the profession. This solid man, Mr. Thayer, evidently had a soul. Peace to his ashes!—*Virginia Med. Journal*.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

JANUARY, 1858.

NO. 8.

ORIGINAL COMMUNICATIONS.

**ART. I.—*Fractures of the Inferior Maxilla.* By FRANK HASTINGS
HAMILTON, M. D.**

(Continued from Page 397.)

Treatment. The few attempts which I have made to restore a completely dislocated tooth to its socket, or to retain it in place when very much loosened, have generally resulted in their removal at some later day, and especially where the fracture has been near the angle, and a molar has been disturbed. I believe it would be better practice always to remove the molars under these circumstances, unless they remain attached to the alveoli, and cannot be removed without bringing these away also: and this whether the loosened tooth is situated in the line of fracture or not. It is seldom that they can be made again to occupy their sockets perfectly, and where the tooth is in the line of the fracture the attempt to restore it to place will sometimes prevent the proper adjustment of the fragments. In cases, also, in which the teeth farther forward are completely dislodged at the seat of fracture, it is scarcely worth while to replace them.

VOL. XIII, NO. VIII.—29.

As to those teeth whose loosened condition is due only to a splitting of the alveola, the same rule will not always apply. Sometimes, after a careful readjustment, the fragments will reunite and the teeth remain firm.

If the alveola is broken only upon one side, through the line of the sockets, the teeth may not be always much disturbed, and the loss of the bony fragments may be of less consequence, nor have I generally succeeded in saving them; yet if they remain adherent to the soft parts, it is proper to make the attempt.

The expedients to which surgeons have resorted for the purpose of retaining in place the fragments, when the bone is broken through its body, may be arranged under the names of ligatures, splints, bandages and slings.

The ligature has been applied both to the teeth and to the bone itself. Thus, in an oblique fracture near the angle, where the fragments could not otherwise be prevented from falling inwards, Baudens passed a strong ligature, formed of thread, around the fragments and in immediate contact with them, tying the ligature over the teeth within the mouth. No accident followed, and on the twenty-third day, when he removed the ligature, the bone had united firmly and smoothly.*

In the case of the fracture of the Inferior Maxilla, reported by Dr. Buck, to the New York Pathological Society, and already referred to, the bone "was broken between the two incisor teeth of the left side; the part of the bone on the left of the fracture was driven in, and interlocked behind the end of the right portion, so as to be separated by a finger's breadth. Finding it impossible otherwise to reduce the fracture, Dr. B. dissected off the under lip, so as to expose the fracture. He found that the right anterior portion of the fractured bone terminated in an angular projection as far as on a line below the left angle of the mouth. The lip was then divided to the chin, and the soft parts holding the fragments together incised. A chisel was then insinuated behind the projecting angle of the bone, while it was being excised by the metacarpal saw. When the bone was restored to its natural position, it was found so apt to become displaced, that holes were drilled at the lower angle of the fracture, and adjustment maintained by wiring them together, the wire passing out through the lower angle of the wound. Sutures and adhesive straps, with a bandage, were employed to maintain the adjustment of the parts. So far the patient has done well, being supported by liquid nourishment introduced through a tube, passed

* Malgaigne, *op. cit.*, p. 398.

through the space left by one of the incisors, which, on account of its looseness, was removed."*

With these two exceptions, so far as I am aware, the ligature has been employed as a means of retention only by fastening it upon the teeth, either upon those which are situated on the opposite sides of the fracture, or upon others a little more remote, or upon the corresponding teeth of the upper jaw, or upon the teeth on the opposite sides of the same jaw.

Ordinarily the ligature, composed of either fine gold, platinum or silver wire, or of firm silk or linen threads—(Celsus advised the use of horse hair)—has been applied to the two teeth on the opposite sides of the fracture, or if these have been not sufficiently firm, to the next teeth. This practise recommended first by Hippocrates, has received the occasional sanction of Ryff, Walner, Chelius, Lizars, Erichson, Miller, B. Cooper, Skey and others, but by Boyer, Gibson and Malgaigne it has been reprobated.

Dr. S. G. Ellis, of Gowanda, N. Y., as we have already seen, has, treated a fracture occurring through the symphysis, in an adult, by placing the mainspring of a watch within the dental arcade, and securing it in place with silver wire. The mouth was kept closed by bandages carried under the chin. The fragments united with only a slight vertical displacement.†

Dr. George Haywood, of Boston, surgeon to the Massachusetts General Hospital, says, "when the bone is not comminuted and there are teeth on each side of the fracture, the ends of the bone can be kept in exact apposition by passing a silver wire or strong thread around these teeth and tying it tightly. In several cases of fracture of the jaw, in which the bone was broken in one place only, I have in the course of the last few years, adopted this practice with entire success, and without the aid of any other means. It will be found very useful, also, as an auxillary, in more severe cases, in which it may be required to use splints and bandages, or to insert a piece of cork between the jaws, as recommended by Delpéch. It requires some mechanical dexterity to apply the thread neatly; but in large cities we can avail ourselves of the skill of dentists for this purpose."‡

Guillaume de Salicet advises to secure, with a silk thread, at the same moment the teeth belonging to the two fragments, and the corresponding teeth of the upper jaw;§ while the dentist Lemaire, being applied to by

* New York Jour. of Med., &c., March, 1847, p. 211.

† Trans. Amer. Med. Assoc. My report on "Deform," &c., vol. viii, p. 383, case 14. Boston Med. & Surg. Jour., vol. xix, p. 133, 1838.

§ Malgaigne, op. cit., p. 392.

Dupuytren to secure in place the ununited fragments of a broken jaw, fastened the two left canine teeth to each other by a wire of platinum, as had been already suggested by Guillaume de Salicet; to these he added two other modes of ligature which were altogether original. One wire, made fast to the last molar upon one side, traversed the mouth and was secured to one of the bicuspidæ upon the opposite side; the other was stretched from the first inferior bicuspid on the right to the first superior bicuspid on the left. A cure was accomplished at the end of two months, but one of the wires had nearly bisected the tongue; and as it had gradually become imbedded, the flesh had closed over it until it rested like a seton through the middle of the tongue.*

None of these various methods recommend themselves very satisfactorily to the practical surgeon; for besides that they are all of them, in a large majority of cases, wholly unnecessary, and in other cases, owing to the absence of the teeth, or to their loosened or decayed condition, or to the closeness with which they are set against each other, absolutely impossible, it must be seen, also, that they will generally prove feeble and inefficient. The wires act only upon the upper extremity of the line of fracture, leaving its lower portions liable to be disturbed by trivial causes; they tend gradually to loosen even the firm teeth which they embrace, and not unfrequently, after having been made fast with much labor, they soon become disarranged or break. They require therefore always the additional protection afforded by bandages. Alone they are insufficient, and if properly constructed bandages or slings are employed, they are not needed. Sometimes, moreover, they are actually mischievous, as when they loosen a sound tooth or press upon and inflame the gums. A. Berard passed a silver wire twice around the necks of two adjoining teeth on the opposite sides of a fracture. It retained the fragments perfectly in apposition during several days; but soon the gums swelled and became painful; the teeth loosened, and it was found necessary to remove the wire. Chassaignac sought to avoid these evils by placing the wire upon the middle of the crown, free from the gums, and by including four teeth instead of two. A waxed linen thread was made fast in this manner, in a case of simple fracture, on the seventh day. On the following morning the thread was found broken. He applied then a silk ligature in the same manner. On about the third day this also was disarranged; the ligatures were now discontinued until the eighteenth day, when he renewed the experiment with a piece of gold wire. Fourteen days

* Malgaigne, from Jour. Univer. des Sci. Med., tom. xix, p. 77.

after this the ligature remained firm, but the gums were red and bleeding. The patient not having again returned to Chaissaignac, the result is not known.*

As to the method suggested by Guillaume do Salicet it presents no advantages to compensate for its inconveniences; while that actually practiced by the dentist Lemaire, successful indeed, threatened to substitute a loss of the tongue for an ununited fracture of the jaw.

Splints have been employed in various ways. First, simple interdental splints, laid along the crowns of the teeth and only sufficiently grooved to be easily retained in place; Second, clasps, which are applied over the crowns and sides of the teeth, operating chiefly by their lateral pressure; Third, splints applied to the outer and inferior margin of the jaw; Fourth, interdental splints or clasps, combined with outside splints.

Interdental splints have been recommended by many surgeons from an early day, and they continue to be employed occasionally up to this moment.

Boyer advises the use of cork splints placed one on each side between the upper and lower jaws, in a few exceptional cases. Miller recommends the same in all cases, the "two wedges of cork sloping gently backwards, with their upper and under surfaces grooved for the reception of the upper and lower teeth." Fergusson also has usually adopted the same practice. Muys and Bertrandi employed ivory wedges.†

On the other hand, they are rejected entirely by Syme, Chelius, Skey, Erichsen, and Gibson.

The objections which have been stated to their use are,—that they are unsteady and become easily loosened and disarranged, that they occasionally press painfully upon the inside of the cheeks, that they accumulate about themselves an offensive sorde, and finally that they are unnecessary, since experience has proven, says Gibson, that "there is always sufficient space between the teeth to enable the patient to imbibe broth or any other thin fluid placed between the teeth."

It is not strictly true, however, that in all cases there will be found sufficient space between the teeth, when the mouth is closed, for the imbibition of nutrient fluids. I have myself seen exceptions, and in such a case the patient, if the mouth were closed in the usual way, would have to be fed through a tube conveyed along the nostrils into the stomach, as suggested by both Samuel and Bransby Cooper in certain bad compound fractures,

* Malgaigne, from *Lond. Med. & Phys. Jour.*, Nov., 1822, p. 401.

† *Lond. Med. Chi. Rev.*, vol. xx, p. 470.

or through an opening made by the extraction of one of the front teeth; neither of which methods ought to be preferred to the interdental splints; but then the separation of the front teeth for the purpose of receiving food, is by no means the only object to be gained by their use, nor indeed the principal object. Their great purpose is to act as splints whenever the absence of teeth either in the upper or lower jaw renders the two corresponding arcades unequal and irregular and prevents our making use of the upper jaw as a kind of internal splint for the lower jaw.

It is with a view to the accomplishment of this important end that they are often valuable, and ought sometimes to be considered as indispensable. I believe, also, that many of the inconveniences which have been found to attend the use of cork or wood, are obviated by the substitution of gutta percha in the manner which I have already recommended in my report to the American Medical Association, made in the year 1855. I have employed this method several times myself, and my suggestions have been followed by Stephen Smith, of the Bellevue Hospital, New York, who, after having used the gutta percha in four cases, affirms that nothing can surpass it in efficiency.

The mode of preparing gutta percha, and of adapting it between the teeth, is as follows: Dip a couple of pieces of the gum, of a proper size, into boiling water, and when they are sufficiently softened, mould them into wedge-shaped blocks, and, having wrapped each block with a piece of cotton cloth, carry them to their appropriate places between the back teeth; immediately press up each horizontal ramus of the jaw until the mouth is sufficiently closed, and the line of the inferior margin is straight; in this position retain the fragments a few minutes, until the gum has sufficiently hardened. Meantime, it will be practicable, generally, to introduce the fingers into the mouth, and to press the gutta percha laterally on each side towards the teeth, and thus to make its position more secure. When it is sufficiently hardened, remove the splints for the purpose of determining more precisely that they are properly shaped and fitted.

The superiority of this splint is now at once perceived. If properly made, it is smooth upon its surface, and not, therefore, so liable to irritate the mouth as wood or cork, and it is so moulded to the teeth that it will never become displaced.

The clasp, applied over the crowns and sides of the teeth is not intended to act as an interdental splint; but by its lateral pressure it is expected to hold the fragments in apposition upon nearly the same principle with the ligature.

Mütter, of Philadelphia, employs for this purpose, a plate of silver folded snugly over the tops and sides of two or more teeth adjacent to the fracture, which apparatus he calls a "clamp."*

Nicole, of Nuremburg, employed for the same purpose, a couple of steel plates fitted accurately along the anterior and posterior dental curvatures, secured in place by a steel clasp, the clasp being furnished with a thumb-screw in order the more effectually to accomplish the lateral pressure.

Malgaigne has extended the idea of Nicole, by substituting for the two steel plates, a single plate composed of flexible and ductile iron, which is fitted accurately to all the irregularities of the posterior dental arch. From the two extremities of this plate, and from two other intermediate points, four small steel shafts arise perpendicularly, cross the crowns of the teeth at right angles, and then fall down again perpendicularly upon the anterior dental arcade. Each steel shaft being furnished with a thumb-screw, the iron plate can now be made to bear against the teeth so as to form a posterior dental splint. The teeth are also protected in front against the direct action of the thumb-screw by the interposition of a leaden plate.

I am not aware that either of these modes have ever been practically tested; and I confess that I can see many disadvantages and inconveniences which would be likely to arise from their use. With the exception of Mütter's "clamp," they are all complex and must be liable to disarrangement; while thumb-screws in the mouth cannot but inflict serious injury by their pressure and friction against the mucous membrane.

Gutta percha employed in the manner which I have recommended, is capable of giving no inconsiderable degree of lateral support to the teeth, and I suspect quite as much as the comfort or interest of the patient will permit, and without many of the inconveniences of the other modes, while it possesses the additional advantage of serving also where this is needed, as an efficient interdental splint.

External splints, applied along the base or outside of the jaw, were first recommended by Paré, who used for this purpose, leather; and they have been employed in some form, occasionally, by most surgeons. Generally they have been composed of flexible materials, such as wetted pasteboard, first recommended by Hesiter, felt, linen saturated with the whites of eggs, paste, dextrine or starch; plaster of Paris has also been used: and they have been retained in place by either bandages or the sling. I have myself used

* Trans. Am. Med. Assoc., vol. viii, p. 391. My report on Deformities, &c.

for this purpose, gutta percha, but I shall speak of it as one form of the sling dressing.

Undoubtedly useful, and even necessary in some cases, especially where there exists a great tendency to a vertical displacement, they will be found, also, in many cases, to render no essential service, and may properly enough be dispensed with.

Whatever objections hold to the use of metallic clasps, must hold equally to the use of those forms of apparatus in which it is attempted to secure the fragments by means of a combination of these clasps with outside splints, and in which it is proposed to dispense with all bandages or slings, the mouth being permitted to open and close freely during the whole treatment. They are liable, moreover, to additional objections which will be readily suggested by an explanation of their mode of construction.

Chopart and Desault originated this idea as early as 1780, for fractures occurring upon both sides; in which cases they advised "bandages composed of crotchets of iron or of steel, placed over the teeth, upon the alveolar margin, covered with cork or with plates of lead, and fastened by thumbcrews to a plate of sheet iron, or to some other material under the jaw."

The apparatus invented by Rutenick, a German surgeon, in 1799, and improved by Kluge, is thus described by Dr. Chester: "It consists, 1st, of small silver grooves, varying in size according as they are to be placed on the incisors or molars, and long enough to extend over the crowns of four teeth; 2d, of a small piece of board, adapted to the lower surface of the jaw, and in shape resembling a horse shoe, having at its two horns, two holes on each side; 3d, of steel hooks of various sizes, each having at one extremity an arch for the reception of the lower lip, and another smaller for securing it over the silver channels on the teeth, and at the other a screw to pass through the horse shoe splint and to be secured to it by a nut and a horizontal branch at its lower surface; 4th, of a cap or silk nightcap to remain on the head; and 5th, of a compress corresponding in shape and size with the splint. The net or cap having been placed on the head and the two straps fastened to it on each side, one immediately in front of the ear and the other about three inches farther back, which are to retain the splint in its position by passing through the two holes in each horn; a silver channel is placed on the four teeth nearest to the fracture, on this the small arch of the hook is placed, and the screw end having been passed through a hole in the splint is screwed firmly to it by the nut, after a compress has been placed between the splint and the integuments below the jaw.

"If there is a double fracture, two channels and two hooks, must, of course, be used."^{*}

Bush invented a similar apparatus in 1822,[†] and Houzelot in 1826; since which the apparatus has been variously modified by Jousset, Lonsdale, Malgaigne and perhaps others.

Lonsdale says he has employed his instrument in numerous cases and with complete success.[‡] Rutenick succeeded with his apparatus in a case where the displacement persisted in spite of all other means.[§] Jousset was also successful in two cases.^{||}

But others have not been equally fortunate; or if they have succeeded in holding the fragments in apposition, and in securing a bony union, other serious accidents have followed.

In the first case mentioned by Houzelot, the instrument was kept on thirteen days, after which an attack of epilepsy deranged every thing, and the patient was transferred to Bicetre. The second patient complained immediately of an intense pain under the chin and a profuse salivation followed. These symptoms were subdued by the sixth day, but, for some reason, the apparatus was finally removed on the tenth day. The fragments hereafter showed no tendency to derangement. Seven days after its removal an abscess, which had formed under the chin, was opened. In the third case the apparatus was left in place thirty days, and an abscess formed also under the chin. Neucourt applied it in a double fracture where the central fragment was much displaced. The apposition was well preserved, but he was obliged to remove it on the seventeenth day on account of a phlegmon which was forming under the chin. The patient to whom Bush applied his apparatus, would wear it but a few days. Malgaigne had the same experience with Bush's apparatus.

In addition to the pain and inflammation, followed by submaxillary abscesses, which have been such frequent results of its use, Malgaigne has noticed that it is exceedingly inclined to slide forwards and become displaced.

In short, notwithstanding the unqualified testimony of Lonsdale in favor of this method of treatment, especially in fractures at the symphysis, and in fractures through any portion of the shaft anterior to the masseter muscle, it

^{*} London Med. Chi. Rev., vol. xx, p. 471, from Monthly Archives of the Medical Sciences, 1834.

[†] Malgaigne, op. cit., p. 395.

[‡] Lonsdale. Practical Treatise on Fractures; London, 1838, p. 234.

[§] Malgaigne, op. cit., p. 396.

^{||} Ibid, p. 396.

is, in my judgment, sufficiently plain that it is applicable to only a very limited number of cases, and I am not certain but that it would be better to reject it altogether; and I should scarcely have thought it worth while to notice these modes of treatment at all were it not for the respectability of the gentlemen who have given them their countenance, and perhaps to show how fruitful and exhaustless in resources is the genius of our profession.

The treatment of fractures of the inferior maxilla by a single headed bandage or roller, numbers among its distinguished advocates the names of Gibson, Barton and H. H. Smith; indeed I think the practice is at the present time, peculiar to a few American surgeons. Gibson gives the following directions for applying his roller: "A cotton or linen compress, of moderate thickness, reaching from the angle of the jaw nearly to the chin, is placed beneath and held by an assistant, while the surgeon takes a roller, four or five yards long, an inch and a-half wide, and passes it by several successive turns under the jaw, up along the sides of the face and over the head; now changing the course of the bandage, he causes it to pass off at a right angle from the perpendicular cast, and to encircle the temple, occiput and forehead, horizontally, by several turns; finally, to render the whole more secure, several additional horizontal turns are made around the back of the neck, under the ear, along the base of the jaw, over the point of the chin. To prevent the roller from slipping or changing its position, a short piece may be secured by a pin to the horizontal turn that encircles the forehead, and passed backwards along the center of the head as far as the neck, where it must be tacked to the lower horizontal turn — taking care to fix one or more pins at every point at which the roller has crossed."

Barton employs, also, a compress, and a roller five yards long; the application of which is thus described by Sargent: "Place the initial extremity of the roller upon the occiput, just below its protuberance, and conduct the cylinder obliquely over the center of the left parietal bone to the top of the head; thence descend across the right temple and the zygomatic arch, and pass beneath the chin to the left side of the face; mount over the left zygoma and temple to the summit of the cranium, and regain the starting point at the occiput by traversing obliquely the right parietal bone; next wind around the base of the lower jaw on the left side to the chin, and thence return to the occiput along the right side of the maxilla; repeat the same course, step by step, until the roller is spent, and then confine its terminal end."

These bandages possess the advantages of being easily obtained, of simplicity and facility of application, and in general, we may add, of complete

adaptation to the ends proposed. The only objections to their use which I have ever noticed, are occasional disarrangements, and the tendency, as in all other continuous rollers, to draw the fragments to one side or the other, according as the successive turns of the bandage are carried to the right or left. There is one other objection, having reference to the occasional inadequacy of this dressing to prevent an overlapping of the fragments, to which also the sling as usually constructed, is equally obnoxious, and of which I shall speak presently.

Finally, it is to the sling, in some of its various forms that surgeons have generally given the preference. The sling is known, also, by the name of the four headed or the four tailed roller or bandage.

B. Bell, Boyer, Skey, S. Cooper, B. Cooper, Syme, Fergusson, Mayor, Lizars and Chelius, employ the sling usually; and the favorite mode is to use for this purpose a piece of muslin cloth about one yard long and four inches wide, torn down from its two extremities to within about three or four inches of the center. Others have used leather, gutta percha, adhesive straps, gum elastic, etc.

Where the muslin is used, it is quite customary to lay against the skin a piece of pasteboard, wetted and moulded to the chin, or simply a soft compress; and some choose to open the center of the bandage sufficient to receive the chin. The middle of this bandage being laid upon the chin, the two ends corresponding to the upper margin of the roller are now carried across the front of the chin, behind the nape of the neck, and made fast; while the two lower heads are brought directly upwards from under the sides of the chin, along the sides of the face, in front of the ears, and made fast upon the top of the head. The dressing is completed by a short counter-band extending across the top of the head from one bandage to the other; or the several bands may be made fast to a night cap, in which case the counter-band will be unnecessary.

It only remains for me to describe my own method of dressing these fractures with the sling.

Having frequently noticed the tendency of the sling, as ordinarily constructed, and of Gibson's roller, to carry the anterior fragment backwards, especially in double fractures, where the body of the bone is broken upon both sides, I devised, some years since, an apparatus intended to obviate this objection, and which I have used now several times with complete success.

It is composed of a firm leather strap, called maxillary, which, passing perpendicularly upwards from under the chin, is made to buckle upon the

top of the head, at a point near the situation of the anterior fontanelle. This strap is supported by two counter-straps, called, respectively, occipital and frontal, made of strong linen webbing. One of these, the occipital, is attached to the posterior margin of the maxillary strap about half an inch above the ear, and being carried around behind and *under* the occiput, it is finally buckled to the maxillary strap upon the opposite side, and at a point exactly corresponding to its origin. The frontal stay simply antagonizes the occipital; and having its origin and termination at the anterior margins of the maxillary strap, it is buckled horizontally across the forehead, and just above the eyebrows.

The maxillary strap is narrow under the chin to avoid pressure upon the front of the neck, but immediately becomes wider so as to cover the sides of the inferior maxilla and face, after which it gradually diminishes to accommodate the buckle upon the top of the head. The anterior margin of this band, at the point corresponding to the symphysis menti, and for about two inches on each side, is supplied with thread holes, for the purpose of attaching a piece of linen which, when the apparatus is in place, shall cross in front of the chin, and prevent the maxillary strap from sliding backwards against the front of the neck.

The advantage of this dressing over any which I have yet seen, consists in its capability to lift the anterior fragment almost vertically, and at the same time it is in no danger of falling forwards and downwards upon the forehead. If, as in the case of most other dressings, the occipital stay had its attachment opposite to the chin, its effect would be to draw the central fragment backwards. By using a firm piece of leather as a maxillary band, and attaching the occipital stay above the ears, this difficulty is completely avoided,

Having removed such teeth as are much loosened at the point of fracture, and replaced those which are loosened at other points, unless it be far back in the mouth, and adjusted the fragments accurately, the lower jaw is to be closed completely upon the upper, and the apparatus snugly applied. It is not necessary, in most cases, to buckle the straps with great firmness, since experience has shown that a sufficient degree of immobility is obtained when the apparatus is only moderately tight. In this matter I am sustained also by the opinion of Mr. Fergusson.

If the integuments are bruised and tender, a compress made of two or more thickness of patent lint should be placed underneath the chin, between it and the leather.

If the inability to introduce nourishment between the teeth when the

mouth is closed, or the irregularity of the dental arcade renders the use of interdental splints necessary, gutta percha, as I have already explained, ought to be preferred to any other material.

The patient must be forbidden to talk, or laugh, and when he lies down his head should rest upon its back, for whatever mode of dressing is employed, and however carefully it is applied, it will be found that a slight motion and displacement will occur whenever the weight of the head rests upon the side of the face.

Occasionally, indeed as often as every two or three days, the apparatus may be loosened or removed, only taking care generally not to disturb the interdental splints, when they are used, and to support the jaw with the hand, during its removal, and the face may be sponged off with warm water and castile soap. It should not be left off entirely, however, in less than three or four weeks, where the fracture is most simple, nor ought the patient to be allowed to eat meat in less than four or five weeks.

To cleanse the mouth and prevent offensive accumulations, it should be washed several times a day with a solution of tincture of myrrh, prepared by adding one drachm to about four ounces of water.

The same apparatus, and without any essential modification, is applicable to fractures of the symphysis and of the angle of the inferior maxilla, as well as to fractures of the body of the bone.

Instead of the leather, I have in a few instances, especially of compound fractures, where it became necessary to allow the pus to discharge externally, used a sling or a splint composed of gutta percha, suspended by bands carried over the top of the head. The piece from which this splint is made should be two or three lines in thickness, covered with cloth, and padded under the chin. It will be found convenient to cover it with cloth before immersing it in the hot water. The water should be nearly at a boiling temperature, so that the splint may become perfectly pliable; and it should be laid upon the face and allowed to mould itself while the patient lies upon his back.

Having thus fitted it accurately to the face, it may be removed and openings made at points corresponding with the wounds upon the skin, before it is reappplied.

In fractures of either condyle, unaccompanied with displacement, the simple leather or muslin sling will sometimes accomplish a perfect and speedy cure, as the two cases reported by Desault will sufficiently demonstrate. But if the fragments have become separated, the replacement is difficult, and the retention uncertain.

Ribes was the first to suggest and to practice the only rational method of reduction in these cases. Having seen two examples which had resulted in deformity under the usual treatment, which consisted in simply pressing forward the angle of the jaw, it occurred to him that while the upper or condyloidean fragment was not acted upon at the same moment by pressure from the opposite direction, a reduction must be impossible. The case of a canonier whose jaw was broken through the neck of the condyle on the right side, and through its body on the left, afforded him an opportunity to determine the practicability of a method of which he had as yet only conceived the idea. Malgaigne thus describes his procedure: With the left hand seize the anterior portion of the jaw, for the purpose of drawing it horizontally forwards, while you carry the index finger of the right hand to the lateral and superior part of the pharynx. You will meet at first the projection formed by the styloid process, but moving your finger forwards you will find soon the posterior border of the ramus of the jaw; and following this border from below upwards, you will arrive at the inner side of the condyle which you will push outwards in such a manner as to engage it upon the other fragment. This manœuvre cannot be made without causing nausea as the finger always does when carried into the posterior part of the pharynx; but this is a slight inconvenience. The reduction obtained, bear the jaw upwards and backwards in order to press and fix the condyle between it and the glenoid cavity, then fasten it in place with the sling." The fragments were thus easily brought into apposition in the case reported by Ribes, and the patient was cured without any deformity.

In addition to these means, the angle of the jaw ought to be pressed permanently forwards by means of a compress placed between it and the mastoid process, and held in place by a suitable bandage.

If the coronoid process be alone broken, it is sufficient to close the mouth with any form of sling or bandage which may be most convenient.

ART. II.—*Blood Poisoning. Numerous Abscesses.* By J. T. JAMESON, M. D., South Otselic, Chenango County, N. Y.

Oct. 31st, 1856, I visited, in consultation with Dr. Bowen, of South Otselic, Miss Beasley, æt. about 15, and received from him the following brief history of the case up to the time of my visit, the doctor having unfortunately taken no notes. The subsequent record of the progress of the case is

from my own note book, penned after each visit. The patient has not menstruated, but has always enjoyed good health up to the period of the present sickness.

Dr. B. saw Miss B. for the first time, about the 8th of October, and found her suffering from a general febrile state, the pulse being about 100; tongue slightly coated, and considerable pain in the head; beneath the chin was observed a hard, somewhat painful swelling, but devoid of redness, and which terminated by resolution in about a week; the throat was somewhat sore, attended with difficulty of deglutition, but the patient could not open the mouth sufficiently to permit of any satisfactory inspection of the fauces; there was also bronchitis of a subacute character; one of the toes (the fourth of the right foot) was inflamed and in a state of suppuration, and had been so for several days, the patient not being conscious of having injured it, although, as she had gone barefooted somewhat, it is very likely that such was the case; little attention, however, was paid to the toe, and it was not then regarded as having any connection with the patient's sickness. Complaints of some pain at the top of the right shoulder; sleep disturbed, the patient muttering and talking considerably during the same; bowels easily moved, and rather disposed to diarrhoea.

Such were the early symptoms of this case, and they were considered as having their origin most probably in cold, to which the patient had improperly exposed herself.

Under the usual antiphlogistic treatment, with the exception of bleeding, which the state of the pulse did not seem to justify, the febrile state and bronchial affection subsided in about ten days.

About a week after Dr. B.'s first visit, a rash, bearing much resemblance to that of scarlatina, appeared over the whole surface of the body, having small reddish looking pimples interspersed: this rash continued in a florid state for two or three days, and then gradually disappeared, unattended with desquamation.

As already stated, the patient, about the time of Dr. B.'s first visit, complained of pain at the top of the right shoulder, but no examination of the part was made until about four days afterwards, when, on inspection, it was found to be slightly swollen, and soon presented the appearance of an ordinary abscess, and being opened, discharged healthy looking pus, the incision speedily closing, and no further collection of pus occurring. Simultaneously with this, a second abscess, about the size of a walnut, was observed a little above the left mastoid process, not manifesting redness, or

pointing, fluctuation being however, evident, and remaining so to the present date, the abscess being, Dr. B. considers, somewhat diminished in size.

About the time of the healing of the abscess on the shoulder, a third appeared on the left forearm in the interosseous space, not attended with much pain, and being opened, discharged healthy looking pus, the wound closing in about four days, but subsequently opening again, and after discharging a little, it closed permanently.

On the 24th of October, the patient having complained of some pain in the back, a fourth abscess was found, on examination, to have formed on the left side of the spine and near the inferior angle of the scapula, without redness of skin or pointing, the matter being manifestly at a considerable depth. On this day, also, three additional abscesses were discovered to be forming, namely, between the right axilla and mamma, on the right forearm in the interosseous space, and on the left side of the neck posteriorly. There was no redness of the skin or pointing connected with these abscesses.

25th. An incision was made into the abscess on the left side of the spine, healthy looking pus being discharged, and the wound quickly closing.

26th. Fluctuation being manifest near the incision of yesterday, another was made, pus of like appearance being discharged, and the wound closing as before.

27th. Opened the abscess between the right axilla and mamma.

29th. Incision of yesterday closed, and fluctuation being apparent near it, another was made, and considerable pus evacuated.

Those on the forearm and left side of the neck have not yet been opened.

During the formation and continuance of the above abscesses, slight febrile action has existed a principal part of the time, the pulse ranging from 110 to 125, and mostly rather weak and small; copious sweats, especially during sleep; progressive emaciation and debility; tongue thickly coated, until the 25th of October, when it began to clean and put on a red and glazed aspect; bowels have manifested a disposition to diarrhoea, which has, however, been readily controlled by anodynes; the state of the lungs has been gradually improving.

On the 25th of October, the patient began to take quinine, strong beer and brandy, with the effect of checking the sweats in a marked manner, and under their use, with occasional anodynes, a little infusion of quassia, and nutritious diet, there has been a gradual improvement as respects the constitutional symptoms. The above completes the entire history of the case so far as I could ascertain it from Dr. B.

Present State. The countenance of the patient indicates prostration, and the emaciation is considerable; pulse 110, and small; tongue almost clean, rather too red, and somewhat glazed; bowels disposed to diarrhoea, but easily controlled by opiates; not much appetite; coughs and expectorates a little; breathing about normal, and the thorax sounds well on percussion beneath the clavicles; slight flushes of fever during the day, but the sweating has almost ceased; on the left side of the spine, and a little below the inferior angle of the scapula, there exists a swelling about the size of the hand, in which fluctuation is evident, but without redness of the skin or pointing; there are the marks of two incisions made by Dr. B. A lancet was introduced, and, perhaps, a third of a teacupful of healthy looking pus evacuated. A little below the right axilla, is a second collection of matter similar to the first, only smaller and fluctuation less decided, which presents the marks of two former incisions; a third incision was made, but failed to reach the pus. On the right forearm, in the interosseous space, is a third swelling, diffused, rather hard, somewhat tender on pressure, skin not red, and fluctuation very obscure. On the left side of the neck posteriorly, is a fourth swelling similar in character to the last mentioned one. On the left forearm, in the interosseous space, is the cicatrix of the abscess opened by Dr. B. at an early period of the disease, and which appears to be now quite sound.

Bread and milk poultices are being applied to the abscesses opened, and a stimulating liniment to the others. She is taking about two grains of quinine every four hours in strong beer, brandy occasionally, diet nutritious, and morphine according to circumstances. I recommended a continuance of the same, with the addition of two grains of hydriodate of potash three times a day.

Nov. 2d. General aspect of the patient rather improved; tongue clean, not so red, and less glazed; pulse 110, rather fuller and stronger; slept well last night.

The patient yesterday directed the attention of Dr. B. to the left gluteal region where she experienced pain, and on inspection there was found a swelling over the gluteus maximus similar in character to the others; no particular change in the other swellings; the third incision made into that on the back has closed, and pus again collected; the abscess on the scalp is being gradually absorbed.

• Cont. Med.

5th. Patient has been about the same since last visit. Pulse 120, and rather small; tongue clean; coughs and expectorates a little; fluctuation being very distinct over the left gluteus, Dr. B. yesterday made an inci:

and evacuated about three ounces of healthy looking pus; fluctuation is very distinct in the right forearm not far from the wrist, and on being opened, the abscess was found to extend upward near to the elbow, the pus being evidently deep seated in the intermuscular cellular tissue, and having gradually worked its way downward; that below the right axilla, was opened for the third time, a tent being introduced with a view to keep the wound open, and I may as well say once for all, that from this time tents were regularly introduced into the different abscesses, being found to answer admirably in maintaining an open state of the wound until the abscess became soundly healed.

Cont. Med.

9th. Since last visit three fresh abscesses have formed, one on the left leg in the interosseous space, the second on the inner side of the left thigh near its junction with the pelvis, and the third on the right side of the neck. Dr. B. opened the second one yesterday, and the first was opened to-day, a considerable quantity of bloody looking pus being discharged. The other abscesses opened have mostly healed, with the exception of that on the right forearm, where a sinus extends a good portion of its length; a compress and bandage were applied with a view to its obliteration. The debility and emaciation have increased; pulse has varied from 110 to 120; the tongue has become covered on the posterior half with an aphthous like coat; no appetite; bowels about regular; the abscess beneath the scalp is almost absorbed; there has been a little more cough and expectoration during the last three or four days. With the formation of fresh abscesses, and the drain from those already opened, it would seem that the patient must soon sink.

Omit pot. hydriod., and give quinine every two hours in strong beer; continue brandy, and give in addition $\mathfrak{zss}$ of wine every four hours.

11th. Patient appears somewhat improved, the pulse being stronger, and strength increased, as manifested by her disposition to help herself in turning in bed, and ability to do so; pulse about 120; hectic flush on left cheek; still coughs and expectorates, the cough being quite loose and expectoration easy; tongue clean; opened the abscesses on the back and right side of the neck, warm water dressing with oiled silk, being subsequently applied; the remaining abscesses are doing well, being all about healed, with the exception of that on the right forearm, and the compress and bandage seeming to be acting favorably upon it, only a few drops of serous fluid being discharged by pressure in the centre of the sinus; no new abscesses, so far as can be ascertained. The wine and more frequent doses of quinine seem to have acted favorably.

Continue the same.

14th. Patient's general condition about the same, but four or five new abscesses are forming, one near the right popliteal space, a second in front of the left elbow-joint, a third in the right lumbar region, and a fourth in the left lumbar region; abscesses opened are doing well.

Cont. quinine, wine, &c.

17th. Opened abscess near the right popliteal space; emaciation and debility seem increasing: the fourth toe of the right foot, which is described in the early part of the case, as being in a state of inflammation and suppuration towards its extremity, has been, for some time past, in a dry scabby condition, and of a darker color than natural; it is now discharging again, and, pressure being made, pus oozes out directly from its extremity, the whole toe, as far as the metatarsal articulation, presenting a dark brown color; the outer aspect of the dorsum of the foot is swollen, but the skin is not red, and no red lines can be discovered on the foot or leg.

Apply a lotion of hydriodate of potash to the toe. Cont. med. and give in addition citrate of iron ter in die.

21st. No particular change since last visit, the patient's countenance and pulse being rather improved; an incision was made into the abscess in the left lumbar region, but failed to reach pus, although the fluctuation was very decided.

Apply flax-seed poultice.

On examining the diseased toe more minutely, there was found a mass of fungus granulations projecting from the extremity of it, and observing a gray spot, like a slough, at the centre of the above mass, I touched it, and found that it was a small shell of bone imbedded in the granulations, and removed it; the toe looks better, although retaining the same dark brown color.

Apply arg. nit. to the granulations.

The patient's appetite is improved, and the tongue clean.

Cont. iron, quinine, wine, &c.

23d. General condition about the same. Opened the abscess on the right side, which appeared to be deep among the abdominal muscles, and evacuated a considerable quantity of a rather thinnish pus; another deep incision was made into the one on the left side, but no collection of matter was reached, although the lancet was covered with pus; toe improved, being less dark in color, and the fungus granulations diminished.

Applied arg. nit. again. Cont. med.

27th. No particular change. Abscess on the right side discharges a serous fluid in small quantity on pressure, and that on the left has discharged

some pus into the poultices; that near the popliteal space, Dr. B. opened again yesterday, the first incision having closed, the pus, which is of a bloody character, appearing to extend deep beneath the heads of the gastrocnemii muscles. Pulse 120, and small; coughs occasionally, but no expectoration; sweats during sleep; bowels rather disposed to constipation; toe almost cicatrized.

Cont. med.

Dec. 1st. Patient's general condition has rather improved; countenance looking better, and tongue clean and more natural. Opened another abscess this morning a little below the right axilla, and another, but more deeply seated, seems formed in the right lumbar region.

Cont. Med.

9th. Some improvement; tongue clean and natural; appetite pretty good; pulse 120, and Dr. B. states that it has fluctuated from 115 to 130; has a little dry cough; bowels moved once in forty-eight hours; Dr. B. has opened the abscess in the right lumbar region; that near the right popliteal space has ceased to discharge, and appears to be soundly healed; that in front of the left elbow advances very slowly, the matter being underneath the tendon of the biceps muscle, and giving an obscure feeling of fluctuation; the elbow is considerably flexed, and cannot be extended.

Cont. quinine, iron, wine and brandy.

14th. Patient seems more prostrated; pulse 130, small and weak; countenance pale and inclining to sallow; tongue clean, and appetite good; has sat up about an hour and a-half; has coughed more, and expectorated some; no fresh abscesses forming so far as known, and those opened have dried up; the swelling in front of the left elbow remains about the same, and although fluctuation was very indistinct, it was deemed best to make an incision, but we did not reach pus; the elbow continues firmly flexed. It ought to have been stated that the right knee continues in a flexed state, in consequence of the abscess in the popliteal space.

Cont. med., and give wine more freely.

28th. Patient has continued about the same since last date, the pulse varying from 115 to 130; coughs occasionally, but no expectoration; tongue clean; appetite pretty good; pulse 120; countenance looks better than at last visit; there has been some discharge from the left elbow, but a swelling still remains there, and the joint is more flexed than it was, and cannot be extended, the wound being still open and discharging slightly. Is using a lotion of hydriodate of potash. Since last visit, an abscess has formed in the interosseous space of the right leg, opened by Dr. B., and seems doing

well. Has not been able to sit up the last week, in consequence of the right leg.

Cont. med.

Jan. 1st, 1857. No material change since last visit. Dr. B. states that another abscess formed in the interosseous space of the right leg near the ankle which he opened, and which is now dried up, a second in the right lumbar region which discharged itself by a former incision; there still remains a tumor in front of the left elbow joint, but little painful, and without manifest fluctuation, the joint being flexed and incapable of extension, and the incision almost closed; countenance improved; tongue clean, and appetite pretty good; has considerable dry cough at intervals, and her mother thinks that it has increased the last few days; pulse 115; has continued the use of quinine, beer, wine, iron and brandy.

Cont. *ibid*.

Jan. 24th. Saw Dr. Bowen, who informed me that the patient at his last visit, three days previously, appeared to be doing well; cough diminished; has gained some flesh, and has sat up as much as two hours; no fresh abscesses; the swelling still remains in front of the left elbow, which is rather more flexed; has been using an ointment of hydriodate of potash to the swelling, but apparently without benefit; try tincture of iodine, and if that fails to do good, a small blister; has been taking a syrup of tamarack bark which has seemingly proved serviceable to the lungs.

Feb. 13th. Dr. B. informed me that the patient has been gradually improving since last date, being now about the house, and able to sit up most of the day; the ointment of hydriodate of potash did not appear to exert any decided influence upon the swelling in front of the left elbow, and the tincture of iodine was then applied with apparent good effect, the tumor gradually subsiding, and she can now extend the elbow nearly to the full extent; the right knee remains somewhat stiff, but is gradually improving; cough gradually disappearing.

March 11th. Dr. B. informed me that our patient was doing remarkably well, having almost acquired her usual flesh, had lost her cough, and almost regained the perfect use of her left elbow, and right lower extremity. It is only necessary to add, that her recovery was complete and permanent.

Remarks. 1. What was the nature of Miss B.'s disease? I do not desire to be dogmatic in supposing that I have rightly designated the complaint, being rather content with having furnished a faithful record of the case, and allowing each of my professional brethren to judge for themselves. It is my

opinion, however, that that insignificant toe was the focus et origo mali. On referring to the history of the case, we find that the patient had gone bare-footed, and might, consequently, have very readily bruised the extremity of that toe, and yet have thought little of it at the time, and the incident have passed from the memory. However this may be, it is certain that the toe was in a state of inflammation and suppuration prior to the system becoming generally deranged, and several days prior to Dr. Bowen's first visit. It seems further evident from the subsequent history and appearance of the toe, together with the exfoliation of the scale of bone, that the inflammation and suppuration were deep seated, affecting the periosteum, and of an unhealthy character.

My idea, then, of the origin of the disease is, that the patient bruised or otherwise injured the extremity of the toe, which was followed by inflammation extending to the periosteum, or primarily affected the said membrane — that the formation of unhealthy pus ensued — that this pus, not finding a speedy outlet, was taken up into the circulation and poisoned the vital fluid, from whence originated the fever, the cutaneous eruption, the lung affection, and the numerous abscesses, implicating almost every part of the body. The fact of this rash and the soreness of the throat may lead some to think of scarlatina, but several circumstances preclude the entertaining of such an idea: 1. There was no scarlatina in the neighborhood. 2. There were several children in the family, and all remained well during the patient's sickness. 3. The eruption did not appear until the patient had been sick a week or ten days, and the first abscesses had begun to form. 4. The swelling was under the chin, and not at the angles of the jaw. 5. There was no cutaneous exfoliation.

It may be proper to state that Dr. Avery, of South Otselec, who visited the patient once or twice, was disposed to consider the disease as acute periostitis. I could not accord with him in this opinion. I have seen several cases of that disease, and although the periosteum of two or three bones may simultaneously or in succession, become the subject of inflammation, I never witnessed anything like the number of abscesses occurring in the present case.

2d. Some of the abscesses in Miss B.'s case occurred in situations where apparently no bone could be implicated.

3d. In all the cases of periostitis which I have observed, so far as I remember, every successive inflammation of the periosteum of the different bones has ended in death of said bones to a greater or less extent, and exfoliation of the same; whereas in Miss B.'s case, although there was un doubt

edly inflammation of the periosteum and exfoliation of bone from the toe, yet of all the subsequent abscesses, several of them deep seated and assuredly in close approximation to the bones, not the slightest exfoliation of bone occurred from any of them, and they healed in a manner hardly credible under the supposition of the periosteum and bone being affected."

For these reasons, I am compelled to differ from my friend, Dr. Avery, and to adhere to the view above expressed, until further light dawns upon my mental horizon.

I think it will be instructive to compare the present case with the interesting one of morbus coxarius, &c., recorded by Dr. O. C. Gibbs in the September number of the Journal. I am disposed to believe that purulent absorption and blood poisoning occurred in that case. Those who feel interested in the subject will find a very valuable article in reference thereto, in No. 41, November, 1837, of the American Journal of the Medical Sciences, by Dr. Watson, of New York. In this paper, Dr. W. states, "that the doctrine which ascribes the secondary disorders to a vitiated condition of the blood induced by the purulent matter, or *other morbid exhalations of inflamed veins mixing with the blood*, the contaminated fluid thus exciting local inflammation in the parts secondarily diseased, is the doctrine most conformable to facts." And in another place, "for it does not follow because capillary phlebitis leads to the local secretion of pus, that the existence of pus in any part is a proof of previous inflammation there. In the majority of instances, the secondary abscess is, beyond a doubt, connected with local inflammation; but where we see superficial collections appearing suddenly without pain, heat or redness: in a word, without any other of the common signs of inflammation than mere tumefaction, we have good reason to believe that such matter has been deposited independently of inflammatory action; in short that it is an exhalation from the contaminated blood, thrown into the cellular tissue in the same way that serum is thrown into the cells of this tissue in a healthy condition of the system; and that it may be taken as evidence of an effort on the part of the general economy, to unburthen the circulating fluid of a foreign substance, by depositing this substance in places in which it is not so likely to be injurious."

Treatment. 2. I am not aware of any specific remedy for this disease; as regards the present case, supposing it to have been one of the kind, a moderate antiphlogistic treatment seemed all that was demanded in the first instance, and all that the constitution would bear; and it soon became manifest that tonics were demanded, and that to a large extent, as the disease

progressed. The patient drank many gallons of wine, brandy, and strong beer, besides the quinine and iron, and notwithstanding a liberal administration of each of these articles, and the careful nursing of a good mother, it appeared, once or twice, as though the patient must inevitably sink under the exhausting disease. There seemed to be no other indication, but to sustain the patient, in every possible way, until such times as nature should accomplish the depuration of the vital fluid; and if the case furnishes no other instruction, it cannot fail to impress upon the mind, the importance of never despairing, even in the worst of cases, but of persevering courageously to the end. In relation to the local treatment, the patient might have been saved considerable pain, and we much annoyance, by the earlier adoption of tents. Several of the abscesses appeared not to be circumscribed by adhesive inflammation, and the pus diffused itself in the subcutaneous and intermuscular cellular tissue; the skin was unaffected, and consequently, although fluctuation might be very distinct, the incisions, having to be made through the healthy skin, speedily closed, leading to a re-collection of pus, and further incisions, both of which were almost entirely dispensed with by a careful introduction of tents, and the patient delivered from much additional suffering.

ART. III.—*Symptoms, Pathology, and Treatment of Dissecting Wounds.*

By EDWIN R. MAXSON, M. D., of Geneva, N. Y.

As dissecting wounds are of frequent occurrence, it becomes a matter of importance that we understand their symptoms, pathology, and treatment: And though comparatively few wounds received during dissection, are followed by serious consequences, yet the liability of the absorption of animal matter, or poison, in every case, renders it essential that we should use the best measures for preventing this absorption; and when we fail in this that we proceed in the best possible manner to counteract its general and local effects.

The fact that a very slight wound, or mere scratch, is liable to take up the poison when it exists, should stimulate us to regard with proper care the slightest abrasion.

We should also remember that effects precisely similar to those following dissecting wounds, may follow exposure to matter, from suppurating, putrid, or sloughing sores on the living subject, two marked and serious cases of which fell under my observation during the summer of 1856.

Symptoms. After an indefinite period, varying from a few hours to several days, poisonous animal matter, whether received from the dead or living subject, produces an irritation in or about the scratch or wound. This irritation gradually increases, and soon red streaks appear extending from the wound along the course of the lymphatics, an asthenic erysipelatous inflammation is soon set up in the hand, and rapidly extends up the arm.

The glands in the axilla become tender, swelled, and painful. The arm become very much swelled, has a dark appearance, and is exceedingly painful, and the inflammation has a tendency to terminate in gangrene or suppuration.

Soon after, the local effects of the poison become apparent, and sometimes before; a feeling of langor supervenes, and sooner or later chills, more or less severe, with nausea and vomiting, follow: succeeded usually, by an irritable but feeble reaction; the fever usually assuming a typhoid character.

Such are the ordinary local and general symptoms following the absorption of poisonous animal matter. But in some cases only the constitutional symptoms are developed, while in others there is only a slight local affection and little or no apparent constitutional derangement.

Pathology. Now if we remember that poisonous animal matter, taken up by the absorbents, produces its peculiar poisonous and debilitating effects upon the lymphatics through which it passes, and also upon the surrounding tissues, we may readily account for the local asthenic erysipelatous inflammation which is set up in the part: and also for its extending rapidly up the arm, involving all the soft parts, but especially those parts through which the principal lymphatics pass.

The passage of the virus through the axillary glands accounts for the irritation, pain, and swelling being so early set up in the axilla, and also for the swelling and suppuration which sometimes takes place in those glands when the arm has been apparently but slightly affected. But we must also remember that the virus not only poisons the tissues through which it passes, but that it soon enters the blood, with which it passes to the brain and every tissue of the body.

Now whether this virus passes through the system with the blood as a foreign substance, or what is more probable by uniting with it, produces a fermentation in decomposition of the blood, it evidently has a debilitating effect upon the brain and nervous system, and thus debilitating the brain, lets down the circulation, and a chill is the result.

The reaction which follows the chill appears to be the result mainly of

the general and local irritation, and is generally of a typhoid character from the first, or very soon becomes so at least.

The local inflammation is generally of an asthenic character, and may terminate in gangrene, from the great congestion of the parts not allowing suppuration to take place.

Treatment. As a precaution in dissecting, the hands should be smeared with sweet oil, and if a scratch or wound occurs, it should be allowed to bleed freely, and sucked by the mouth, in order to extract any virus that may have been taken up.

The wound may then be touched with nitrate of silver, and then the patient should take a good nourishing diet, with regularity, to keep up the general strength, and to retain the integrity of the blood.

Gentle exercise, too, in the open air, is essential to promote the same object in such cases.

If however, in spite of all this, general or local symptoms of the poison make their appearance, there is evidence that the virus has entered the blood, and that it is producing a change in that fluid, passing with it not only through the heart and large blood-vessels, but also through the minute capillaries.

Now to reach this virus and to counteract its debilitating effects in all the minute ramifications of the circulatory vessels, and also to suspend the probable fermentation of the blood, which is being set up, alcohol appears to be the very best remedy. From a gill to half a pint of whisky may be sweetened, then mixed with an equal quantity of milk, and taken in two or three draughts, at intervals of half an hour; this arrests the sinking tendency, and, as I believe, the fermentation or decomposition of the blood.

The sulphate of quinine, in from two to four grain doses, with one or two grains pulv. camph. should then be given every four or six hours, and continued through the whole course of the disease.

The alcohol at once arrests the sinking tendency, after which the quinine and camphor not only keep up the powers of the system, but favors, as I am satisfied from careful observation, early resolution in the local asthenic inflammation.

A solution of the sulphate of iron, two or three drachms to the pint of water, may be applied to the inflamed part at first, but if the swelling be very great, or if matter form, free scarification should be made and poultices or warm water dressings applied.

ART. IV.—*Abstract of the Clinical Lectures delivered at the Buffalo Hospital of the Sisters of Charity, upon the Diseases treated in the Male Medical Ward, by AUSTIN FLINT, M. D., Attending Physician, during the present College Session, viz., from October 14th, 1857, to February 27, 1858. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. II. *For November.*

Bulbous Enlargement of the Fingers and Toes occurring in the course of Pulmo-Tuberculosis.

During the past two years, in several cases of pulmo-tuberculosis which have been under treatment in the wards of the hospital, there has been observed to exist a singular appearance of the fingers. This has been called by writers "clubbed fingers" or "bulbous enlargement." It is usually accompanied with an incurvation of the nails which are frequently cracked transversely.

This condition of the fingers, it is well known, does not exist in the course of every case of pulmo-tuberculosis: neither is it presented alone in this disease. It has been observed in cases of aneurism of the arch of the aorta, in cyanosis, and in empyema; but it is much more frequently met with during the course of tuberculosis.

In connection with the latter disease, it is seen now and then, and heretofore has been regarded merely as a clinical curiosity. Occurring as one of the many symptoms in the clinical history of pulmo tuberculosis, Dr. Walshe in his treatise on "Diseases of the Lungs and Heart," briefly refers to this appearance as follows:

"Bulbousness of the finger-ends, curvation and transverse cracking of the finger-nails, and falling of the hair, are observed in a certain share of cases." Evidently, regarding the enlargement of the finger-ends as a casual symptom inconsistent in its appearance, and unconnected with any particular state of the pulmonary disease.

It is now nearly a year since Prof. Flint remarked, that the bulbous enlargement of the finger-ends with incurvation of the nails, would be found to exist with extensive tuberculous solidification of one lung. Up to that time, five cases had been observed, upon which the foregoing conclusion was based. Since then, opportunities have offered to verify the accuracy of the observation.

It may be interesting to record briefly the facts developed in reference to this subject, on examination of two patients now in the hospital, who are affected with tuberculosis and present clubbed fingers and incurved nails.

Oct. 2d, 1857, Dr. F. examined the chest of a patient for the first time. Physical signs denoting extensive solidification of the right lung and comparatively little of the left, were found to exist.

Dr. F. then remarked to me, that, according to the results of observations in similar instances occurring in this hospital, we should expect to find bulbous enlargement of the fingers. On examination of the hands this appearance was found to exist in a marked degree.

Oct. 17th, 1857, Dr. F. noticed a patient presenting the clubbed finger ends with incurvation of the nails; and stated, that in accordance with what had been previously noticed, this patient should have solidification from tuberculous matter, much more extensive on one side than the other.

On examination of the chest, the physical signs afforded conclusive evidence of such a condition of the left lung.

In all, *nine* cases have been observed to present the foregoing conditions coëxisting. In every case presented in the hospital during the past two years, in which there has existed very general solidification of one lung and comparatively little of the other, from tuberculous matter, the bulbous fingers have likewise been found. And in every case, during the same period, in the same institution, in which the bulbous finger-ends with incurved nails, have been observed, there has coëxisted extensive solidification of one lung and but little comparatively of the other.

Taking out of consideration those rare forms of disease in which this enlarged condition of the finger-ends is said to have been occasionally noticed, it may be stated as a rule, that *whenever there is present bulbous enlargement of the finger-ends with incurvation of the nails, there coëxists more or less extensive solidification of one lung from tuberculous disease; the other being very slightly affected.*

This rule, it should be borne in mind, has been deduced from observations made in *nine* successive cases: and, with a single exception, extended over a period of nearly two years.

Since these results have been obtained, the writer has directed his attention to the toes: and in three cases, being all which have come under his notice, in which the bulbous finger-ends and incurved nails exist in a marked degree, there has been found a similar condition of the ends of the toes and of the nails, but in a less marked degree. It would appear, therefore, that this enlargement of the extremities of the digits is not confined to the fingers,

but exists both in the fingers and the toes. The same inference would apply to the incurvation of the nails.

The practical importance of this clinical discovery is not insignificant, as—at first sight—might be supposed. If the rule we have announced hold good, this peculiar condition of the fingers would be of no little aid to us in those instances in which some cause or causes prevent us from examining the chest, and more often in those cases where the physical signs might be obscure or of doubtful interpretation; and in any case, as additional testimony to the accuracy of our diagnosis.

Case of Tuberculosis and sub-acute Rheumatism coëxisting; Effect of Iodide of Potassium.

This patient has been under observation for a number of years. The pulmonary disease is singularly slow in its progress. The attacks of rheumatism are pretty frequent; and are sub-acute; that is, of less intensity than the acute, but still confined to the joints. The rheumatic affection has yielded generally very readily to treatment.

The remedy which has, by repeated trials, proved the most efficacious, is the iodide of potassium. This medicine has invariably given relief, and in a very short time the rheumatic attack has disappeared. When continued for any length of time, sometimes but a few days, an eruption has been observed, on the face more especially; this is at first papular, but soon becomes vesicular and pustular. Cases in which tuberculosis and rheumatism coëxist, are comparatively rare. Patients affected with the former disease are, as a general rule, exempt from attacks of the latter disease; and *vice versa*. It is interesting to observe in the foregoing case, the slow progress of the pulmonary affection, and the readiness with which the rheumatism yields to treatment.

Gastralgia and Enteralgia.

Two cases of neuralgia affecting different portions of the alimentary canal have been under treatment in the ward. In one instance, the stomach is the seat of pain; and in the other, the duodenum probably.

When neuralgia affects the digestive apparatus, it is said to be persistent; and the cure of it difficult. Usually, there is found more or less tenderness over the spine; but, in both these cases, this was very slight indeed, and observed for a short time only.

These patients complain of sharp and lancinating pain referred to the

regions of the stomach and of the umbilicus respectively. The pain is not continuous, but in both cases has been paroxysmal. The patients are attacked suddenly and in the night time, being awakened from sleep by sharp pain, which gradually increases and becomes cutting or lancinating. After continuing for six or eight hours, the pain slowly subsides, and merely a sense of soreness remains in the respective regions of the stomach and of the umbilicus.

The disease in both instances has proved singularly obstinate to treatment; the pain has not even showed a disposition to abate. Morphia, when administered before the paroxysm commenced or during its continuance, has deferred the attack of pain or has produced great relief. But, the paroxysms have invariably recurred. A faithful trial of quinia, and of arsenic, of bismuth, and of iodide of potassium, has been made. But, the results have been unsatisfactory. Under the use of the sub-nitrate of bismuth in large doses, from 3as to 3j, three times daily, there seemed to be in each case, for a short time, a decided improvement. But, this medicine soon appeared to be of very little, if any benefit.

ART. V.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, DEC. 1, 1857.

The association met at the usual hour.

Present—The President, Dr. Flint, in the chair. Drs. Wyckoff, Newman, Lemon, Gay, Root, A. Flint, Jr., Eastman, Rogers, Hawley, Gould, Wilcox, Rochester, Hamilton, Miner, Hutchins, Ring, and A. W. Nichols.

The secretary being absent, the reading of the minutes of the last meeting, on motion, was dispensed with.

Dr. A. W. Nichols was appointed secretary pro. tem.

Dr. Miner, chairman of the committee on Dissection Wounds, then read an interesting and elaborate report on dissection wounds, quoting a number of cases in support of his arguments, which we regret cannot be published in the Journal, though they are of great interest, as the space will not permit. The following is an abstract of Dr. M.'s report:

Report on Dissection Wounds. By J. F. MINER, M. D.

In response to the invitation of the association, and in obedience to my own feelings of interest, I have somewhat industriously searched for the

reported cases of post-mortem poisoning, which, together with those furnished by my friends, and those which have fallen under my own observation, I wish very briefly to present, prefacing the facts by the simple remark, that upon the same testimony and quoting the same cases, equally distinguished observers have been led to the most opposite and conflicting opinions.*

CASE I. Jan. 5, 1850, my brother, D. N. Miner, M. D., of Ware, Mass., received a very slight prick upon the middle finger in sewing the body of a child dead fifteen hours of acute peritonitis. The following day was attacked by pain in the head, back, and bones generally. Some rigor, thirst, heat, and great nervous irritability. Fever of a low, typhoid character, continued for some time, during which the state of exhaustion was extreme; to speak, move, or even breathe, seemed too much effort for his exhausted nervous power.

In about two weeks abscesses formed upon, and under the muscles of the shoulder, chest, and arm, which when opened discharged quantities of healthy looking pus.

Abscesses continued to form for ten or twelve weeks, greatly reducing his strength and producing extreme emaciation. The local effects at the place of puncture were very slight, not appearing at all for three weeks, and then only a small pustule, around the base of the nail, the nail gradually separating from its attachments.

Treatment consisted in poultices on the abscesses, and early opening, which even as soon as detected would not unfrequently discharge half a pint of pure pus. Constitutionally: brandy, quinine, opium and customary diet.

Under this treatment he gradually regained his health after a year's illness.

CASE II. During the illness of my brother, while the matter from the abscesses was discharging so freely, my mother, 64 years of age, robust and

* The following are some of the references to cases, made by Dr. Miner:

New York Journal, vol. ix, p. 209.

North American Med. Journal, vol. v, p. 106.

Good's Study of Medicine.

American Journal, vol. i, p. 315.

Medical Repository, No. 113.

Mr. Travers on Hoisoned Wounds, Med. Chirurg. Review.

Med. News and Library, vol. xv, No. 175, p. 110.

Lancet, May 16, 1857.

healthy, at 4 or 5 o'clock, P. M., made a slight scratch upon her thumb with a pin while washing some of the linen which had been worn upon the person of her son.

She passed a restless, sleepless night; suffered agonizing pain in the thumb and hand; severe chill; high fever; great thirst.

The most positive signs of mortification were presented in the short space of eighteen or twenty hours from receipt of injury.

In twenty-four hours the hand and arm was frightfully distended. Pain now increased to agony; large mortified patches upon the hand and forearm; inflammation extending to the tissues of the shoulder, neck and chest, terminating in mortification of the whole arm and shoulder previous to death. Died comatose on the fourth day.

Treatment. Brandy, opium, poultices.

I wish, also, in this connection, to read a brief account of my own case, though it seems quite unnecessary, as many members of the society kindly visited me during my illness, besides Dr. Root, Prof. Flint, and Prof. Hamilton, to whom I am vastly indebted for attendance. Still as it is the third case in the same family, and may have some bearing upon the subject of constitutional peculiarity or susceptibility, I shall be pardoned for reading it.

CASE III. March 21, 1857, made post-mortem examination of a child dead some fifteen hours of pleurisy, with effusion, left lung being compressed and that side of chest filled with serum and pus. In sewing up the body the eye of the needle passed apparently into the scarf skin only, upon the end of the thumb.

Eighteen hours after experienced pain in the thumb, soreness of the axillary gland, and by shaving off the outer skin found a small collection of a milky fluid at the point of puncture.

In twenty-four hours whole hand and arm excessively painful, with considerable redness of the forearm and swelling of the axillary glands. System affected with high irritative fever.

In thirty-six hours thumb opened to the bone, which at the end was completely mortified; very little matter escaped.

On the third day signs of mortification extending, Prof. Hamilton made a deep lengthened incision through distended thumb. The whole hand seemed nearly as much involved in the inflammation as the thumb.

The inflammatory action gradually abated after about a week. The end

of the thumb involved in mortification, at length separated, bringing with it some small pieces of bone.

One abscess formed over the ulna, which was early opened, and rapidly healed.

At this time, six months after injury, the whole hand enlarged and stiffened.

Treatment consisted of yeast poultices to the hand and arm; opium to, allay the agony of pain; quinine, brandy, champaigne and other tonics and stimulants.

Wm. Lawrence says in his lectures before his class, published in *Medical Gazette*, copied from *Medico-Chirurgical Review* of 1829-30:

"It seems to me very doubtful in these cases, whether any thing that can be called *virulent* or *poisonous* is introduced into the human frame by these occurrences, or whether these effects are to be explained as resulting from such injuries considered mechanically.

"As to the constitutional disturbance that may ensue in conjunction with these local symptoms, it is of an inflammatory character and must be treated by antiphlogistic means, according to the extent of the disturbance. I acknowledge I am inclined to discourage as much as I can the idea of a poisonous nature attached to these wounds, because I conceive the opinion produces much alarm. I do not, however, argue against their poisonous nature from this motive, but I give you my opinion formed from the consideration of the phenomena independent of any view of that kind.

"I am certainly glad that I arrive at this conclusion, any other opinion would lead you to prosecute your anatomical studies with greater anxiety."

He then quotes cases illustrative of these views, which are here omitted.

Mr. Benjamin Travers, in his work on Constitutional Irritation, seems to have followed a careful line of observation. He divides his cases into simple injuries, and absorption of specific poison. He proves by a case, that inflammation is not necessary to the most virulent and fatal action of the poison.

As cases of simple irritation he also speaks of an unhealthy cook who was attacked with pain, swelling, fever, &c., &c., after boning a stale hare. Yet he says:

"It is probable that the irritation in some of these cases, though strictly local, is in its nature such as to act upon the constitution with greater severity than that of similar clean wounds."

Thus it will be seen Mr. Travers has narrowed down his position and almost abandoned his class, the result of simple irritation; for the other, named

absorption of poisonous matter; or if not the absorption, at least the peculiar action or irritation of such matter.

Mr. Travers gives: "Milky vesicle upon the site of the wound; intense pain in the shoulder; erythematous inflammation, together with extreme dejection of spirits and constitutional suffering, as truly diagnostic of a case of absorption: while a simple local irritant is both liable and competent to produce erysipelatous redness of the wounded hand, pain passing up the arm; enlarged glands and deep-seated abscess in the axilla, with symptomatic fever of suppuration."

That there is a specific poison generated in human, and some animal bodies, *soon* after death, modified by, but not limited to, any particular forms of disease, existing very soon after death and rendered inert or less virulent by time or the process of putrification, we may consider pretty well established. While as nothing definite or satisfactory is known of the nature or character of this agent, and I avoid a mention of all speculation concerning it, yet I will suggest that whatever may be its properties, it seems capable of transmission through one victim to another undiminished in its strength, perhaps unchanged in its character, certainly unchecked in its fatality, though perhaps more facts and experiments are wanting to fully justify the conclusion.

In evidence of this I will refer you to the case of my brother and mother, which are, I conceive, sufficient to establish my position; there are numerous other cases on record pointing to this same fact, which are here omitted for want of space.

That poison exists, or is generated in all dead bodies, we have no means of certain knowledge. It seems probable, however, that it does exist in a greater or less degree.* Yet it will by no means follow that anatomists uniformly suffer. In the dissecting room the great majority of subjects are comparatively old. The play of chemical affinities, which have been supposed to create during their action some new and poisonous compound, has subsided, in a great measure, if it ever existed. Again, the medication to which these bodies are subjected by alcoholic baths and injections of creosote, arsenic, &c., into the vessels to preserve them from decay, may reasonably be supposed to produce a counteracting effect.

It is the generally expressed opinion, and appears from all the facts I am

* Garcilaso de la Vega, in his History of the Spaniards in the Indies, part ii, vol. i, chapter 42, observes: "All the Indians in the westward islands poison their arrows by dipping their points in dead bodies."—*Good's Study of Medicine*.

able to collect, that *time* also, has an important influence, connected as it is with heat, cold, moisture, and other atmospheric conditions.

Most cases of poisoning arise from dissections made very soon after death. Hence, though a body possess the poisoning quality in a feeble or imperceptible degree a few days later, it may not be inferred that previously it did not contain the most concentrated and potent poison.

Yet after all these protecting and controlling influences, together with the usual good health, and correct living, of medical students and anatomists, still wounds received, are often, indeed I think *usually*, attended by an unnatural irritation and an uncommon reluctance in healing. Also by more tingling and smarting pain than is usual from other injuries, if fortunately unattended by no more serious consequences. Mode of introduction, constitutional peculiarity or susceptibility, general health and habits of life, go far to determine the question of risk. An open, free bleeding wound, seems quite unattended with danger, compared with the slight pricks which may be scarcely seen or felt.

According to Liston, "inoculation is dangerous when the body of *any* person has become putrid; also when the body is recently dead, especially if it has been a case of puerperal disease. Symptoms are most violent from those wounds."

"The contagious material seems also to pervade alike all the fluids of the decomposing body, not being at all confined to the morbid parts." The disease follows where the abraded surface comes in contact with fluids from the stomach, secretions from serous or mucous membranes; when it has touched a towel or sponge used in wiping up the fluids or other material requiring to be removed. Dr. Cumming only threaded a needle which had been wetted. It was followed by fatal poisoning.

Again, the existence or character of the contagious material, would seem in no very exclusive manner to depend upon the disease of which the subject has died. It has been held to follow only after inflammation of serous membranes, puerperal disease producing it with the greatest virulence.

The cases collected, though wholly inadequate to establish the proportions by different diseases, still show that it is not confined to any particular one. No attempt has been made to collect a great number. Of the few obtained we find

From subjects dead of Peritonitis,	4,	Fatal,	2
" " " Pleurisy,	1,	"	0
" " " Puerperal Fever,	4,	"	3

From subjects dead of Hæmorrhage,	2,	Fatal,	2
“ “ “ Consumption,	2,	“	2
“ “ “ Enteritis and Erysipelas,	1,	“	1
“ “ “ Typhus,	1,	“	1
“ “ “ Croup,	1,	“	0
“ “ “ Unknown,	4,	“	2
Whole number,	20	Fatal,	13

Reference is also made to poisoning received

From dead animals,	3,	Fatal,	2
Communicated to attendants,	9,	“	3

There seems to exist some curious relationship between post-mortem poisoning and erythematous or erysipelatous inflammation. Dr. Good, in his Study of Medicine, has treated it under the head of erythema anatomicum.

Dr. Ebenezer B. Pulling, assisted in the examination of a woman who died of hæmorrhage. In the course of a few days he complained of pain in a finger which he had wounded. From a point in the finger, the swelling extended to the middle of the arm above the elbow, and was there arrested. Soon after, swelling commenced on the same finger of the other hand, and spread thence almost over the whole body. It proved fatal, and this case was the beginning of a fatal epidemic of erysipelas, the first case of which was a clergyman, who had acted as nurse to Dr. Pulling.

Cases might be introduced indicating the conveyance of erysipelatous disease to lying-in-women, and also the virus of dead animal bodies, which might be conveyed, even though much care had been taken, if soon brought in contact with the delicate surfaces of the vagina and neck of the uterus.

This would show the absolute criminality of physicians making post-mortem examinations, and immediately, or soon after, attending obstetric practice; also the prudence of declining obstetric practice during attendance upon erysipelatous disease of any kind. I do not regard this the place to introduce them, yet cannot refrain making the above practical suggestion, leaving the further consideration of this branch of my subject for some future occasion.

It may be observed that in most of these cases, the brain and nervous system sympathise quickly and deeply. They mostly exhibit strong excitement in the commencement, and early and rapid prostration. The stomach and diaphragm are affected in some, not in others. Local inflammation, stronger

in some than others. In some there is a marked affection of the absorbent vessels, with erythematous, serous or suppurative inflammation of the cellular substance of the arm, axilla, and breast. Mortification seems in some cases to be produced without the preliminary stage of inflammation, so virulent and fatal is the action of the poison.

These symptoms, then, are to be met by appropriate treatment. I have some delicacy in attempting to indicate what may be appropriate when so great differences exist in the opinions of the most eminent authorities. I have already indicated the views of many of the most distinguished physicians and surgeons, both of our own and foreign countries, in reporting the cases with which they have been connected.*

Sir Astley Cooper, in his eighth lecture on poisoned wounds, has given in a condensed form, his views of the nature and treatment of dissection wounds.

"I attribute the bad effects occasionally taking place in dissection wounds, not to any morbid matter introduced into the wound, but to the irritability of the person's constitution at the time. From imagining that a putrid diathesis existed, many persons were in the habit of giving wine and bark, and never allowed that the symptoms resulted from inflammation; the consequence was, many died under this plan of treatment."

Sir Astley himself, some years since, suffered from such accident. He called a friend, who prescribed wine and bark. He submitted to this for some time, during which all the symptoms became aggravated. He then changed the treatment to antiphlogistic measures and got well. He recommends caustics, nit. acid if the wound be deep; leeches and fomentations; antiphlogistic regimen adopted to its *full extent*; calomel succeeded, or accompanied by saline purgatives; opium and antimony according to the discretion of the surgeon.

I should be happy to quote more fully the opinions and practice of physicians, but will say only they seem divided: some maintaining and adopting one extreme, some the other. I will briefly mention some of the means used to prevent the absorption of poison after wounds have been received.

Some interesting experiments by M. Bouillard, published in the Archives Générales du Médecine, Nov., 1826, would seem to show a value in ligaturing immediately above the wound, and then by washing, suction by mouth or cupping glass, removing as much as possible, the virus.

Caustic and other applications to the wound are generally and with good reason adopted. Nit. acid, nit. argenti, tinct. iodine, &c.

* Many of these cases are omitted for want of space.—ED. JOUR.

To neutralize it when once introduced, or with the view to prevent its poisonous action, mercury and iodine have been suggested and used, but with no positive results to justify its employment. Mercury has also been employed on account of its supposed control over inflammatory action.

The depressed and agitated nervous system, which in almost all cases is violently affected, should certainly be soothed and quieted. The local or general pain which often amounts to an agony, should most certainly be relieved and moderated as much as possible. Opium then, in some of its forms, is urgently demanded in the treatment of most, if not all the cases of post-mortem poisoning.

In these cases, there is generally great depression, with early and rapidly increasing prostration. This can most effectively be met by stimulants and tonics—brandy and quinine, early and late, *first* and *last*. And by this I mean most of these cases will very early admit and demand support; later in the disease it will form our chief reliance.

The high irritative fever and the severe general and local pains, have been treated by free and repeated venesections. This has been quite generally adopted and is sustained by the highest and most commanding authority. Most of the reported fatal cases have been bled; I had almost said all the severe cases which have been largely bled, have been fatal. I think I have presented to you some remarkable illustrations of the power of nature to overcome both disease and treatment combined, a case, where from three to four quarts of blood was drawn from the arm, and two or three hundred leeches applied.

While the system generally is sustained, it may sometimes be necessary and proper, locally to deplete; and I wish earnestly to indorse and recommend the plan adopted by several surgeons, of freely and deeply laying open with the scalpel highly inflamed, distended, tense, and painful parts. A favorable result in many cases will depend mainly upon this plan being early and fearlessly adopted. There is no inconsistency in sustaining the system on the one hand, and endeavoring to overcome local inflammation by incisions, cupping, leeching, &c., on the other.

I have attempted nothing new, or designed attacking anything old; avoided theories of my own and others, and condensed the reports of cases as much as consistent; yet an apology is due you for trespassing upon your time so long, and also for presenting this subject in so brief and imperfect a manner, leaving so much unsaid, so many cases uncollected, and so many opinions of accurate observers unnoticed.

Prof. Hamilton remarked that he should but respond to the opinion of

members of the society, when he said that they had listened to an able and interesting paper from Dr. Miner. The fact, however, that it was an able paper, rendered it the more necessary that just criticisms should not be omitted. It contained in his judgment, one blemish which ought not to pass unnoticed. The writer believed all dead bodies generated a poison, and presented in evidence of this fact a traveler's tale that a certain tribe of Indians dipped their arrows in dead bodies before entering battle. Dr. Hamilton did not believe that any tribe of Indians ever practised such a method of seeking the death of their enemies. The statement was wholly improbable, and unworthy of a place in such a paper. And if this was all the evidence upon which the writer's belief in the universal generation of poison in dead bodies, rested, then it was inconclusive.

Dr. Hamilton was unwilling that such an opinion should receive the sanction of this society. There were present a great many young men who would be afraid to prosecute their dissections; but he would remind them that we, who are their seniors, have dissected a great deal, and often been cut and scratched, and yet that we have never been poisoned. It is an exceedingly rare event that a student is poisoned in the dissecting-room. In his opinion this poison was not generated constantly in dead bodies, but only under peculiar circumstances, having relation to the character of the malady occasioning death, to the tissue diseased, and probably also to the peculiar agency of air and moisture after death, in consequence of which certain chemical changes were wrought which we do not yet understand.

Dr. Hamilton referred also the testimony of Parent Duchatelet, in relation to the general healthfulness of those employed constantly in large dissecting rooms, and to the condition of health observed in the women and children employed at the Chantieres d'eguarrissage, Paris. He had himself seen them sitting in piles of putrid meat picking the flesh from the bones; and in this occupation they must wound themselves often, still they look healthy, except as they indicate the influence of sedentary habits and confinement.

This Dr. Hamilton only presented as a kind of collateral testimony upon the point on which he was speaking, but it had its value.

Dr. Miner replied that Dr. Hamilton had entered the Hall late, and had not heard the remarks which preceded and accompanied the statement upon which his animadversions were based; that the paper did not make any very positive statement concerning the existence of poison in all dead bodies, and distinctly avowed that we had no means of certain knowledge. Yet from indirect and collateral evidence, such as he had presented he was of opinion that poisonous properties did exist in all dead human bodies, for a longer or

a shorter period, in greater or less degree, modified by influences which we do not understand. Garcelaco de la Vega's account was very likely chimerical, he had not introduced it as evidence, or given it a place in the body of the paper; had merely referred to it, giving credit to Good's Study of Medicine, as the place from which it was obtained. It was referred to only as a story, expecting it would be received as traditional, and not by any means as conclusive proof or reliable medical testimony; he hoped the paper would give the medical students present no unnecessary anxiety, since Prof. Hamilton is of opinion poison exists only *very rarely*, and Wm. Lawrence, before his class, was *very glad* to think it did not exist *at all*.

Prof. Hamilton replied that with the explanations made by Dr. Miner, he was satisfied that his criticisms were unjust, but he regretted that Dr. Miner should have seen fit even to mention so doubtful a story as that of the Indians; it would be very likely to strike others as it did Dr. H., as insufficient testimony.

Prof. Rochester remarked that in furtherance of Dr. Hamilton's suggestion, as the paper now legitimately belong to the society, he would move that the paragraph containing the account by Garcelaco de la Vega, be stricken from the paper, if Dr. Miner had no objection.

Dr. Miner did not desire to make any defence for the paper or any part of it; was willing the society should do with it as it saw fit; he did not consider Dr. Hamilton's criticisms in any way unjust or unfair, and would not like to have them withdrawn. If Dr. Hamilton could sustain his position it was desirable he should do so. Dr. Hamilton had referred to the testimony of Parent Duchatelet which Dr. Miner considered as wholly opposed by universal and well known facts. That large dissecting rooms and all places where vapor from decaying animal matter was largely and constantly inhaled were uniformly unhealthy; that diarrhoea and constitutional disturbance, with loss of appetite, was a very common and almost constant consequence; that *this* account was not unlike the one opposed; to reject the first, and embrace the last, was only refusing the account of the historian and adopting known error.

Dr. Root then reported the following case:

Cartilaginous Degeneration of Mitral Valves and Thickening of the Aortic Valves.

Thomas Grady, aged 45 years, tinner, Irish.

I was first called to see Grady, on 28th Oct. last. He stated that he had been ill more or less for the past seven years, though for the greater part of

the time he had been able to work at his trade, that of a tinner. He had been treated for consumption and dropsy of the heart, and had taken much medicine. He had the impression that he had consumption. For the last four years he had at times attacks of hæmorrhage from the lungs; difficult breathing; cough, which was pretty constant, and night sweats occasionally. When I first saw him he had just returned from the east, where he had been in search of work, and while in Rochester had an attack of hæmoptysis and difficult breathing.

Present Symptoms. General aspect pallid and emaciated to a moderate extent, though he always was rather thin; sitting in his chair; breathing labored; cough; expectoration of frothy mucus; no hæmoptysis; vomiting occasionally. His chief complaint was of a pain in the right groin, the seat of an old hernia. The pulse was full, strong, and about 80; respirations not enumerated. Percussions, in different regions of the chest, developed nothing unusual; I did not discover greater or more extended dullness over the præcordial region than normal; vesicular murmur intense, and mucous râle before a paroxysm of cough and expectoration. Sounds of heart over præcordial region loud and impulse strong. I did not detect any valvular murmurs.

I placed him on a tonic and sustaining course of treatment, and in a few days he was out of doors.

Nov. 16, 9, P. M., was called to see Grady. Had been at work that day at his trade, and had made three boilers in a little over a half day; he came home very much exhausted. Respiration very labored; cough, with expectoration of mucus mixed with blood; had vomited several times; pulse *full, strong and labored*; was sitting up in his chair but was very restless. The asthmatic symptoms and restlessness continued to increase till 6, A. M., when he died. The autopsy was made twenty-seven hours after death by Dr. A. W. Nichols.

Post-mortem examination confined to cavity of thorax.

The pleura was adherent on both sides, by recent and ancient exudation. The lungs were considerably congested, the right to a much greater extent than the left.

There were no signs of pericarditis; the amount of fluid in the pericardial sac was slight.

The heart was not much increased in size, being $4\frac{1}{2}$ inches long and $4\frac{1}{2}$ wide. It weighed $17\frac{1}{2}$ ounces. The ventricles were hypertrophied: the right ventricle was half an inch in thickness, and the left sixth-eighths of an

inch. The right ventricular cavity was not enlarged. The left ventricular cavity was smaller than natural.

The aortic valves were contracted and thickened. The mitral valves were extensively diseased, being thickened, contracted, puckered, and filled with large deposit of calcareous matter.

The cause of death in this patient is thus apparent: congestion of the lungs from obstruction of mitral valve. The heart is seen to be moderately hypertrophied and of the kind called *concentric*. The ventricles were of less capacity than normal—particularly the left. The chief point of interest to me is the fact of the pulse being uniformly, as far as I could discover, *strong* and *full*. The strength of the pulse is explained by the existence of hypertrophy, which was the diagnosis of the case. The hypertrophy was suspected from the strength of the pulse and impulse of the heart; usually in obstruction of the mitral valve with hypertrophy, the pulse is said to be *small* and *not well developed*, but were it was strong and full. The fullness was owing to the small capacity of the left ventricle. The mitral obstruction was not so great but that enough blood could be forced through to fill the whole of the ventricle, and the ventricle being full and *hypertrophied*, on its contraction, the full and strong pulse necessarily results.

From the nature of the case, the valvular murmurs, if any existed, were not easily detected. The mitral orifice was so small and of such shape, that regurgitation could not take place. Whether there was aortic regurgitation I am unable to say: none was detected. The hæmoptysis was of course owing to the congestion of the lungs, and the congestion arose from the mitral obstruction.

The fullness of the pulmonary artery, left side of the heart and venæ cavae, was caused by the same obstruction of the valve acting through the capillaries of the lungs.

Dr. Wyckoff reported another case of heart-disease, as follows:

Oscar A. Hall, aged 9 years, called at my office, in company with his mother, Oct. 8, 1857, complaining of great weakness and inability to make any exertion; said that he could not walk fast or far without stopping to rest; had constant palpitation of the heart, which was distressingly increased by exercise; had also at the time some diarrhoea; eyes looked yellow; countenance pale and rather tumid; pulse frequent and feeble. Upon making a physical examination found evident signs of hypertrophy, also a very feeble but *distinct bellows murmur*: the second sound of the heart was very feeble and indistinct.

Prescribed for the diarrhoea, expecting to see him again very soon: did not see him again, however, until Nov. 3d, when I was sent for to see him; found him suffering very much from dyspnoea, also a slight cough, rather dry; unable to lie down; face palid and swollen; feet and ankles also swollen; pulse thread-like, and 160 per minute. Upon physical examination, found no bellows murmur, and no second sound of the heart; respiratory sound very indistinct over the lower portion of the lungs; percussion dull in the same locality.

Nov. 5th. I found my patient laboring under still greater dyspnoea than at last visit; pulse more feeble; the sounds of the heart the same; the sibilant rale to be heard over the whole upper portion of the left lung; had been obliged to sit up in his chair all night.

Nov. 6th, 9, A. M. Much more feeble; distress greatly increased; pulse not perceptible at the wrist; died at 2 o'clock, immediately after getting up out of his chair to get a drink of water.

Post-mortem. The whole heart much enlarged, but the left ventricle more than any other portion, being much dilated as well as hypertrophied; weight of heart eighteen ounces.

The valves were all healthy except the aortic, which were but two in number, &c.

The diameter of the aortic orifice was also diminished, I think nearly or quite one half.

Effusion of a large quantity of serum in the cavity of the chest, mostly upon the right side; the whole of the lower lobe of the right lung and a part of the lower lobe of left, were carnified; liver congested, large and hard, almost granular.

This patient had never been affected with rheumatism.

Prof. Flint exhibited a fine specimen of aneurism of the arch of the aorta. The sac was quite large, and not ruptured.

The patient had been laboring for many years under some affection of the chest.

The tumor has been examined by several physicians prior to his decease. The patient died suddenly, but not from rupture of the aneurism.

The association then adjourned.

AUSTIN W. NICHOLS, M. D.,

Secretary *pro tem.*

ART. VI.—*The Transactions of the American Medical Association.*
Instituted 1857. Vol. X.

Our national medical association has now completed its tenth year; that it has not accomplished all the good which was desired and expected by those who were so zealously interested in its organization, is sufficiently well known; but that it has been nevertheless of great value to the profession, seems to us to be equally true. We conceive that the delegates would have been more numerous, and that the profession would have been more equally represented from all parts of the United States, if the place of meeting had been more accessible, and more interesting to strangers from attractions not connected immediately with the meeting of the association. Of all places in which it would be likely to meet, Nashville is the most inaccessible; but still after once getting there, the characteristic open hand, open heart, and open house, of our friends who inhabit that section of the country, which we ourselves experienced for some time, could not fail to make the few days which were passed by the members in Nashville, as agreeable, if not more so, than they would have been in a large city. All of our friends who attended the last meeting, have been loud in their praises of the good things and good feeling which greeted them on their arrival at Nashville.

The association met at 11 o'clock, May 5th, Dr. Zina Pitcher, of Detroit, in the chair, who was warmly welcomed by Dr. C. K. Winston, in a short but pertinent and beautiful address. The roll of delegates was then called, and a recess taken for the organization of a committee on nominations, who nominated: for president, Paul F. Eve; vice-presidents, R. I. Breckenridge, of Ky., D. M. Reese, of N. Y., W. H. Byford, of Indiana, and H. F. Campbell, of Georgia.

The officers were then conducted to their places by Drs. Wiston, Arnold, and McGugin.

Nothing new or interesting appears in the minutes of the meeting, with the exception of a protest entered by four members of the association, against the admission of delegates from the Oglethorpe Medical College, of Savannah, on the ground that since the existence of that institution, the several chairs of the college have not been regularly filled by the gentlemen appointed to them; this was referred to a committee appointed by the chair, who reported that the college had not in any way violated the letter of the law of the association. Resolutions embodying a plan for the charters of State and County Medical Societies, were offered and adopted; and the as-

sociation recognized the presentation of a pamphlet by Dr. Campbell, claiming "Priority in the Discovery and Naming of the Excito-Secretory System of Nerves," a matter which has lately been before the profession and an acknowledgment of which was publicly made by Dr. Hall before his death.

The great bulk of the transactions is occupied by the papers referred to the committee on publications. Many of these are articles of great interest, forming by no means a less interesting collection than we have had in the preceding volumes of the transactions.

First, we have the address of Dr. Pitcher, the president. Every medical society is opened by an address on some subject connected with medicine. The opening and closing of all our medical schools is signalized by a similar event, and some of our colleges even go so far as to have a distinct introductory delivered by each professor. Dr. Pitcher's address was short, but in other particulars resembled closely the numerous discourses which are received by us every day, delivered by some professor before some of our colleges or at the meeting of some of our societies: having no particular subject and incidentally alluding to some of the benefits arising from the organization of the association.

We next have a report on the Topography and Epidemics of Maryland. Epidemics of dysentery have appeared during the summer months in various parts of the state, but they have been exceeding mild and manageable; the author having had a hundred cases under his own care, two of which only, proved fatal. Malarial fevers, the author finds to be universally under the control of quinine, which is almost the only remedy used in its treatment. In looking through the volume we notice reports on the topography and epidemics of Georgia and Washington territory, which possess more local than general interest, and which we must therefore dismiss with a mere mention.

Report on Infant Mortality in large cities, the Sources of its Increase and Means for its Diminution. By D. MEREDITH REESE, M. D., LL. D., etc.

In as much, as at least two copies of this report, extracted from the transactions, have been sent to the Journal, we conclude that the writer desires his scheme for the reduction in the rate of infant mortality to be extensively known.

Dr. Reese in the first place, shows by mortality statistics of the city of New York, that for the last fifty years, forty-nine per cent. of the entire mortality, has been of children under five years of age, and that "still-born

and premature birth" interments equal *one-fifth* of the entire infant mortality. The Dr. then assumes that the Creator did not intend that so many individuals should be ushered into the world merely to perish before they arrived at the age of five years. Of course as humane men and physicians, it is our duty to save life whenever we are able, but we should never question the ways of the Almighty; did not our Saviour say, "suffer little children to come unto me, and forbid them not, for of such is the kingdom of Heaven," and it is certainly a question which arises to us, when we contemplate some of our fellow-men; would it not have been better not for themselves and especially for the world, if Providence had pleased that they should have been among those who died young? The measures which the Dr. recommends for the prevention of this horrible mortality, are:

"1. No marriage should be permitted between parties, until the physical health of both has been subjected to professional scrutiny. And such alliances should be prohibited by law, to those of either sex, who are the subjects of those diseases which are known to be hereditary or transmissible to offspring, or such as are fatal to infantile existence. Celibacy should be required by statute of all consumptive, scrofulous, scorbutic, gouty, insane, intemperate, and especially syphilitic individuals of either sex, and this, for grave reasons of state, which concern the public weal. Nor will any course short of such legal prohibition of marriage, adequately correct the evil of that large proportion of infant mortality thus engendered."

The first part of this first proposition would be quite remunerative to the physician, but we fear that it would occupy so much time to examine the condition of marriageable persons, that we would be entirely unable to attend to the sick children; so that this would balance the good which we might do by prevention. The passage of a law by which celibacy should be required of all individuals laboring under the above mentioned peculiarities, would, we conceive, be hardly practicable; in the first place we apprehend that such persons would constitute a majority in most of our legislative bodies; and if, for sake of argument, such a law should be passed, the result would be a great want of increase on the part of our population, or rather, what is more probable, a community composed mostly of illegitimate children; especially as in the second proposition he says, that

"2. To remove the temptations to the unnatural crime of abortionism, and prevent the abandonment and cruel murder of unborn and newly-born infants, among the vicious and depraved portion of our population, for purposes of concealment, as in the case of the illegitimate offspring of shame, foundling hospitals should be provided by the State, in all our large cities,

for the reception of infants, and the concealment of the shame of unhallowed mothers, and the protection and preservation of the infant innocents, who are doomed to abandonment by the guilty authors of their being. This, with a proposal for a lying-in asylum for women generally, married or unmarried, 'irrespective of character,' with ordinary sanitary regulations, constitute the bulk of Dr. Reese's suggestion towards the "means of diminishing infant mortality." We have extracted enough to give our readers an idea how feasible and intelligent his views are.

Report on the Medico-Legal Duties of Coroners. By ALEXANDER J. SIMMES, M. D.

In many cities the office of coroner by no means holds the rank to which it is entitled; any one is thought fit for a coroner, and the office often devolves on men who are entirely incompetent. *The coroner should always be an intelligent physician.* We are fortunate in this city to have this office filled from our number, and hope that this custom will prevail here hereafter. We see by the paper of Dr. Simmes, that in ancient times this office was held in high estimation; and when we reflect upon the importance and responsibility of his duties, we wonder that it has not as much consideration at the present day. The committee on this subject do not report a very flattering account of the usual mode of conducting coroner's inquests in this country; and they we have no doubt are generally correct. A point strongly recommended in the report, is privacy in conducting inquests, at the discretion of the coroner; this we conceive should always be attended to, if for no other reason than to prevent misrepresentations in regard to evidence, and to abate public excitement. The report also recommends a provision for the reasonable remuneration of medical expenses for examination of the body and testimony.

We pass over several interesting reports, to the Report on Deformities after Fractures, by Prof. HAMILTON.

This is the third part, and the conclusion of the report. Dr. Hamilton has of late years associated his name forever with the great subject of fractures and dislocations, and we are very much mistaken if in years to come, there will not be many a young surgeon who will bless the memory of Dr. Hamilton when he is sued for a short leg or a crooked arm, and can turn to the cases collected by the author of this report, and show the *results* of such injuries. If this be not the case, it will be because these reports will have abolished all unjust suits for malpractice. In the first part of this report,

which appeared in 1855, fractures of the bones of the head, face, and fractures of the clavicle are considered. The second part, 1856, treats of fractures of the scapula and superior extremity; and the third and last part, of fractures of the remaining bones of the skeleton, with the exception of the bones of the trunk and the bones of the foot, the chapters relating to which were withdrawn by the author with a view to the diminution of the size of the report.

The subject of fractures is by far the most important in the whole range of surgery; first on account of the occasional difficulty in their diagnosis and treatment, and second, because they are injuries which come under the care of every practitioner, and in the country especially, it is not possible to avoid taking charge of the case, no matter how obscure and difficult. Then again, there are certain fractures which it is impossible to treat with a perfect result, and the almost invariable failure of all our most skillful endeavors to bring about a perfect cure in fractures of the femur especially, makes this the most important surgical bone in the skeleton.

Dr. Hamilton has collected, and analyzed with reference to the relative frequency of fracture in different parts of this bone, the age of the patient, the causes, the most successful mode of management, and especially the resulting deformity, one hundred and five cases of fracture of the femur; and for all practical purposes this number is as useful as one hundred thousand. The result of Dr. Hamilton's observations, is that the femur constitutes an exception to the other long bones in respect to the most frequent seat of fracture; this bone being most often broken in its middle third, while the others are most frequently fractured in their lower third.

In fractures of the neck, we have an amount of shortening varying from half an inch to two inches, the average being eleven-twelfths of an inch. The average confinement to the bed is four months and two days.

In fifty-six cases of simple fracture of the shaft, the average shortening is half an inch and $\frac{2}{3}$, or a little more than half an inch. "The average shortening in forty-seven simple cases, in which the exact result is recorded, rejecting not only all of those in which any serious form of complication existed, but also all of those which resulted in no shortening, is three-quarters of an inch and 1-47." "In thirty-two simple cases in which the straight splint, with extension, &c., was used, the average shortening was half an inch and 1-38; and in seven simple fractures in which the double inclined plane is known to have been used, the average shortening is three-quarters of an inch and $\frac{1}{2}$, or including in the estimate, all the fractures of the femur, both simple and complicated, known to have been treated by the straight

splint mainly, the average shortening is half an inch and $\frac{1}{2}$, or a fraction less than three-quarters of an inch; while in all the fractures known to have been treated mainly by the double inclined plane, the average shortening is one inch and a quarter."

Our readers cannot fail to see immediately the great value of these conclusions; and we must consider that **THESE ARE FACTS**, not the speculation of an individual, or rough general ideas formed by a surgeon of extensive experience, but an actual analysis of reported cases, which have been treated by various surgeons and the results of which have been personally ascertained by the author in the presence of witnesses. What is the first question which is asked of the surgeon after he has dressed a limb? How long, doctor, will it probably be before I can get about? and immediately after this you are asked whether you can make the bone as good as it was before. A young surgeon would be often very much puzzled to answer these questions unless he could refer to the report of fractures by Dr. Hamilton, where he could find the *facts* in relation to this matter. In a court of justice, when the result may be ruin, which has been planned by some envious fellow-practitioner, or an ungrateful patient, who is unwilling to pay; where can we find a defence so certain and reliable as this; the results and deformities which usually follow certain fractures in the hands of the best of surgeons?

In concluding our notice of this report, we cannot but express our admiration of the author's intrepidity in thus daring to publish to the world all his cases: those which were not followed by perfect results as well as those which have been; the satisfaction however, of having placed so much useful matter in the hands of the profession is a sufficient reward. We understand that a few persons are under the impression, that the *Treatise on Fractures and Dislocations* which is in preparation by the author of this report, will embody the *cases* which are reported. The treatise will embody the results to which the author has arrived in his report; but in a volume of that kind it is almost unnecessary to say that the cases will not be published.*

We notice a report by Prof. Dugas, on dislocations of the shoulder, containing a new principle of diagnosis in these accidents. "If the fingers of the injured limb can be placed by the patient or surgeon upon the sound shoulder, while the elbow touches the thorax, *there can be no dislocation*; and if this cannot be done, *there must be a dislocation*." This report is accompanied by wood-cuts of the skeleton, which establish this point suffi-

* Appended to this report is an account of some of the American inventions and improvements of apparatus.

ently well. We can think of only one thing which might create a difficulty in the universal application of this method. Should the patient's abdomen be excessively protuberant, might not this principle fail; the elbow not going to the lower part of the thorax, but the thorax advancing to the elbow? It strikes us that there might be a possibility of difficulty in this respect.

Prize Essay. The Excito-Secretory System of Nerves. Its relations to Physiology and Pathology. By HENRY FRAZER CAMPBELL, M. D., Professor of Special and Comparative Anatomy in the Medical College of Georgia, etc., etc.

The importance of this essay, and the interest which this subject has of late excited, both in this country and Great Britain, would bespeak for it a more extended notice than it is possible to give in this review of the Transactions. Our readers will see that the present number is filled entirely with original material, and several interesting articles have been unavoidably laid over, as well as articles of great interest, which we had intended should appear in our Eclectic Department.

We have carefully perused the essay of Dr. Campbell, as much for our own gratification, as for purposes of review, and we are confident that every one will consider himself sufficiently repaid by as careful a consideration. We are forcibly struck in the first place, by the appropriate motto which heads the essay, "*Observation becomes experiment when used in severe processes of induction.*"—VICTOR COUSIN."

The material for this essay, as Dr. Campbell remarks, is sufficiently abundant and has been accumulating in the hands of the experimental physiologist and the thoughtful and accomplished physician for years, and it is due to the author to state, that these materials have been thoughtfully and ably moulded into one of the most interesting and profitable papers of the day. The illustration of this system and the physiological and pathological phenomena on which this theory is based, are, and have been familiar to every one; though the generalization and arrangement of them into a distinct theory, is new, and to Dr. Campbell belongs the exclusive credit which so useful a discovery merits. "Experiment without analysis, (quoting the words of the author) is ever inadequate and unproductive," and Dr. Campbell has proved by the valuable contribution which he has presented to the literature of the nervous system, that careful and judicious induction from the experiments of others is more valuable even than the original observations.

In 1837, Dr. Marshall Hall published his great discovery of the relation

which existed between the sensory and the motor portions of the nervous system, called the *excito-motory* functions. Claude Bernard has demonstrated by his experiments in producing artificial diabetes by mechanical irritation of the floor of the fourth ventricle, that the nervous centres may be made to exert an undue influence on secretion, by mechanical means. Magendie's experiments on the results of the division of the fifth pair, go to establish the same doctrine; but Dr. Campbell has shown that in addition to the influence which the sensory system has on motion, it has its influence upon secretion; producing normally the effects which are familiar to us as physiologists, and pathologically the effects which were produced by Magendie in his experiments on the fifth pair, and by Bernard in his experiments of irritation, the floor of the fourth ventricle. Illustrations of this fact are familiar to every one; the profuse secretion of tears when the eye is exposed to the cold wind; the modifications in the urinary secretion in diseases of the uterus, of the skin, etc., are occurrences which we meet with every day.

We copy in conclusion, a quotation made by the author, which applies to almost every decided advancement in science. "The ultimate attainment of every truth," write the great Sir William Hamilton, "has ever been by *gradual approach*," and, as it is not unkindred to our theme, we quote his apt illustration: "The history, in regard to the discovery of the distinction between sensitive and motor filaments in the nerves, finally established by Sir C. Bell, was only the last of a long series of *previous observations* tending to the same effect;" or, in the words of Prof. Wherwell, "the facts were known, but they were insulated and unconnected till the discoverer supplied from his own stores, a principle of connection. The pearls are there, but they will not hang together till some one supplies the string."

The concluding article in this volume of the Transactions, is another prize essay by Dr. Wm. A. Hammond, U. S. A., entitled, *Experimental Researches relative to the Nutritive Value and Physiological Effects of Albumen, Starch and Gum, when singly and exclusively used as food.*

These investigations were all instituted upon the person of the author, and show an enthusiasm and devotion to science, worthy of the cause. These investigations were commenced by a careful analysis of the quantity and quality of the urine and feces, the state of the pulse, temperature of the body, etc., during the author's ordinary avocations and while he was taking his usual quantity and quality of food. With this as a point of departure, Dr. Hammond made observations of the effects of an exclusive

diet of pure albumen, and water, which he continued for ten days; of an exclusive diet of starch and water, which he continued also for ten days; and of gum and water, which he was compelled to discontinue after the fourth day.

The more important results of the exclusive diet of albumen, were the loss of weight, commencing on the fifth day, and the appearance of albumen in the urine on the sixth day. That life cannot be sustained by a single article of diet, even though it be of so nutritious a character as albumen, has been sufficiently well established even before the experiments of Dr. Hammond; but it has been the general opinion that this diet does not produce albuminuria. The latter fact is established by the author in his own case, where albumen appeared in the urine on the sixth day and increased in quantity to the tenth, when the experiment was concluded. After using an exclusive diet of starch for a few days, sugar appeared in the urine, debility was excessive, with palpitation of the heart and pyrosis. The desire for other food was very great. The author was compelled to discontinue the diet of gum after the fourth day, as it produced great hunger, debility, and febrile movement, together with severe pains in the abdomen, and great loss of weight.

These experiments by Dr. Hammond are extremely useful, demonstrating the inability of a single nutritious element to sustain life, and showing interesting effects of such a course of diet upon the constitution of the urine, feces and blood. In the case of gum, we may draw an important lesson from these experiments in the administration of this article in disease. It is here shown to be absolutely without nutritious qualities, and moreover to be positively injurious. Under these circumstances we would be disposed to agree with the Dr. in especially condemning it as an article of food for the sick.

We are sorry that our space does not enable us to do better justice to some of the interesting and important papers contained in this volume: especially the papers by Dr. Hamilton, Dr. Campbell and Dr. Hamilton; but we have far exceeded the limits which we had prescribed for ourselves before commencing this review.

ART. VII.—*Report of Mortality in Buffalo for the month of Nov., 1857.*

By C. L. DAYTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Accident, ...	1	1	
Asphyxia Immersorum, ...	2	1	1
Apoplexia, ...	1		1
Cholera Infantum, ...	5	2	2
Croup, ...	3	2	1
Diarrhoea, ...	3	1	2
Dysentery, ...	3	2	1
Dentition, ...	2	1	1
Debilitas Senilis, ...	6	2	4
Delirium Tremens, ...	1	1	
Eclampsia, ...	10	4	5
Erysipelas, ...	1	1	
Enteritis, ...	1		1
Febris Typhoid, ...	5	3	2
" Typhus, ...	1		1
" Scarlatina, ...	4	1	3
Gastritis Acuta, ...	1	1	
Hyperæmia Cerebralis, ...	2		1
" Pulmonalis, ...	2	1	1
Hydrops, ...	5	3	2
Hæmorrhage, ...	1		1
Hydrocephalus, ...	2	1	1
Ignotus, ...	22	11	8
Intemperance, ...	3	1	2
Marasmus, ...	3	2	1
Morbus Cordis, ...	3	3	
Peritonitis, ...	1		1
Pneumonitis, ...	11	6	3
Pertussis, ...	2		1
Rubeola, ...	3	3	
Still-born, ...	5	3	
Tuberculosis Pulmonalis, ...	12	5	7
Total, ...	127		

SEXES.

Males, ...	62
Females, ...	54
Sex not given, ...	11
Total, ...	127

AGES.

Still-born, ...	5	Between 20 years and 30 years, ...	11
1 day, ...	3	" 30 " " 40 "	9
1 day and 30 days, ...	15	" 40 " " 50 "	7
Between 1 month and 6 months, ...	15	" 50 " " 60 "	1
" 6 months and 12 "	13	" 60 " " 70 "	5
" 1 year " 3 years, ...	21	" 70 " " 80 "	3
" 3 " " 5 "	7	" 80 " " 90 "	1
" 5 " " 10 "	5	" 90 " " 100 "	1
" 10 " " 20 "	6	" 100 " "	0
Total number under 10 years, ...	83	Total number over 10 years, ...	44
Ages not given, ...	0	Total, ...	127

NATIVITIES.

American, (white,)	72	Prussian, ...	0
" (colored,)	3	Swiss, ...	1
German, ...	18	French, ...	2
Irish, ...	14	Scotch, ...	2
English, ...	3	Poland, ...	0
Canadian, ...	0	Country not given, ...	12
Total, ...			127

Detection by Etherialization of Feigned Idiocy.—Etherization has been resorted to in Belgium as a means of acquiring judicial information. After a considerable robbery committed at Brussels, in November last, two men, named Lorch and Daubner, were arrested and brought to trial. The former was condemned to hard labor for life; but in consequence of the latter pretending to be dumb and idiotic, his trial was postponed, in order that a medical investigation should take place. It was found impossible to get even a sign of intelligence from him. As it was, however, known that he was not born dumb, and that he had spoken, when he said that he could speak no language but German, he was etherized, and while laboring under the effect of that application, he spoke perfectly, and in French. He was in consequence again brought before the tribunal, and condemned to ten years' hard labor.—*British Med. Journal*, Aug. 1st, 1857.

EDITORIAL DEPARTMENT.

Sydenham Society.—This society, after having published some forty volumes of works which were inaccessible to the English reader, it is feared is about to come to an untimely end. Its members at one time reached some sixteen hundred in number. It has at present nearly a thousand, and is now laboring under financial difficulties. A meeting was to be held on the 7th of November, in London, to devise some measures to prevent the dissolution of the society, but from the tone of the London *Lancet*, there seems to be but little hope of success. Mismanagement is said to be the cause of its failure. The London *Medical Times & Gazette*, of Nov. 14th, states that the society is defunct.—*Western Lancet*.

The death of the Sydenham Society will be a calamity indeed, to the profession. The subscription, which was very insignificant, considering the number and quality of books to which it entitled its members, being only five dollars, enabled them to obtain books not elsewhere published in English, and many old works which had gone out of print and which it was exceedingly desirable to revive; and the translations which are so valuable, were entrusted to the most distinguished men in their respective branches, in Great Britain.

We hope that the report of the *Medical Times & Gazette* is not entirely true, and that the society, though suspended for a time, may rise from its ashes. It is gratifying, however, to the profession to know, that the present difficulties are not attributed to want of appreciation on the part of medical men, but to mismanagement: it seems that with still a thousand members it should be able to hold its own. The corresponding secretary in this country, is Dr. Richard J. Dunglison, of Philadelphia.

F.

Sorghum, or Chinese Sugar Cane.—This article, which has lately been imported, finds our northern climate peculiarly favorable to its growth. It is now produced in quantities in different parts of the States, and a sample of its product in the form of molasses, has been sent to the Buffalo market. We have lately had an opportunity of testing its properties as an article of food, but the specimen which was shown to us appeared to have been a little burned in the process of manufacture. The peculiarity most interesting to us in a scientific point of view is, that no one has been able to make it granulate and form sugar. We have, indeed, the statement of a distinguished chemist connected with one of our southern sugar works, that this is impossible; this of course would materially injure the prospect of our being relieved from the necessity of depending upon the South for our sugars. We hope that this matter will be thoroughly investigated by our competent chemists, and the substance discovered which prevents the process of granulation common to saccharine matter. When this is accomplished, it seems probable that the sorghum will become an exceedingly important article of commerce, as the cane yields largely, even by the cheap and imperfect processes which have been employed in the manufacture of molasses.

F.

Lectures on Materia Medica in the University of Buffalo.—Circumstances rendering it inconvenient for Prof. C. A. Lee to give the course on Materia Medica, in the University of Buffalo, during the present session, Dr. Theophilus W. Mack, of St. Catharines, C. W., was appointed by the medical faculty to officiate in his stead. Dr. Mack has given much attention to the study of chemistry and materia medica; his proficiency in these branches, together with his large experience and scholarly attainments, render him admirably fitted to discharge with ability and success the duties of a public teacher. His lectures have been received by the class with marked satisfaction.

*

Dr. Reynold's Truss.—We call the attention of our readers to the advertisement of Dr. Reynold's Truss in this number. Like all really valuable inventions it is simple in its construction, consisting of a simple band with-

out the iron spring which has been heretofore considered a necessary evil. In the band is concealed a short elastic spring, only two inches in length acting on the point of rupture by means of a block so governed that its pressure is upward and backward. The band is held in position by two perineal straps. It is the lightest truss we have seen and less liable to chafe and irritate.

Jordan's Muscle.—We see by the pages of the Virginia Medical Journal, that our poet professor, Dr. Homes, had presented a description of this muscle to the Boston Society for Medical Improvement, before it appeared in the Virginia Journal. Dr. Jordan is certainly entitled to credit for calling the attention of the profession to this anomaly, not knowing that it had been done before him; but in the article quoted from the Boston Journal, Dr. Holmes refers to Meckel, Thiele, Vesalius and John Bell, as having mentioned its existence.

Successful Treatment of Vesico-Vaginal Fistula by Cauterization.—We notice in the Dec. number of the Cincinnati Medical Observer, a report of a case, by Dr. G. Bruhl, of vesico-vaginal fistula, successfully treated by cauterization with the nitrate of silver. Dr. Bruhl saw the patient fourteen days after delivery, who suffered under a transverse fistula about $1\frac{1}{4}$ inches long, a little above the centre of the vagina. As the patient was unwilling to submit to an operation, she was treated by the application of solid nitrate of silver, twice a week. In four weeks the opening had completely closed.

Dr. Benedict's Winter Retreat at Magnolia.—We would call the attention of physicians who have patients in delicate health, who are benefited by winters in the South, to the establishment of Dr. Benedict, at Magnolia, Florida. Dr. B. has himself suffered from pulmonary disease, but has recovered, and deems his improvement in a great measure, due to the influence of the salubrious and equable climate of Florida. By his circular, physicians will see that the retreat presents every facility for healthy exercise and amuse.

ment, while the climate is in every way suited to the invalid and the luxurious seeker after comfort. Access is easy, living cheap, and everything which can conduce to the comfort of the inmates is provided.

Dr. B. is well known as a practitioner in New York and Philadelphia, and is provided with excellent references. F.

BELOIT, Dec. 2d, 1857.

DR. HUNT,—Since writing you a few days since, another case of hæmorrhage from the ear has occurred under my observation.

J. G., while riding along a business street was thrown suddenly from his wagon by another team which was running. He fell with great force, striking upon the left side of the head. He remained in the position assumed by the fall, some minutes, when taken up by friends. When raised up the blood streamed from the left ear quite profusely, and continued for some twenty or thirty minutes.

Partial reaction took place; sat up; semiconscious; vomited some, and was taken home, some mile distant. After getting home he grew comatose until stertorous breathing was seen, and remained in this condition forty-eight hours, when death took place.

Fracture of the base of the skull was "*diagnosed*," (according to the Boston Med. Jour.,) by a physician, (not myself,) and an operation proposed, viz., "cutting down upon the occipital bone to *find* depression for the application of the trephine," and was performed with no perceptible result.

Post-mortem revealed a fracture of the petrous portion of the temporal bone, and an extravasation of blood at the base extending to the thalamus-opticus, to the amount of half a pound.

Yours,

H. P. STRONG.

Improvement in Methods of rendering Medicinal Preparations pleasing to the eye and to the taste, and agreeable to use. By FREDERICK STEARNS, Pharmacist, Detroit, Mich.

The above is the title of a paper read before the American Pharmaceutical Association, at its sixth annual meeting, by our former townsman, Mr. Stearns, now of Detroit. All practitioners have experienced and continue

to experience, great annoyance, from the unwillingness of many of their patients to take disagreeable remedies, and we are often deceived by our patients throwing away their medicines, thereby exposing the doctor to perplexity in not being able to understand why his remedies produce no effect; or, what is equally common, leading him to exult over a rapid and gratifying cure, when the patient and friends know that nature alone is entitled to the credit. Under the latter circumstance, especially the physician, is apt to lose some of the reputation for omniscience which it is so essential to establish and maintain.

In looking over the paper by Mr. Stearns, we notice a number of exceedingly useful suggestions in this department; our personal knowledge of the author makes us feel an interest in his welfare; he is now working with the right spirit and in the right way, and we predict that he must succeed. F.

Medical Lexicon. A Dictionary of Medical Science. By ROBLEY DUNGLISON, M. D., LL. D., Professor of the Institutes of Medicine, etc., in the Jefferson Medical College of Philadelphia. Revised and very greatly enlarged. Philadelphia: Blanchard & Lea. 1857.

This work, the appearance of the fifteenth edition of which, it has become our duty and pleasure to announce, is perhaps the most stupendous monument of labor and erudition in medical literature. One would hardly suppose after constant use of the preceding editions, where we have never failed to find a sufficiently full explanation of every medical term, that in this edition "*about six thousand subjects and terms have been added*," with a careful revision and correction of the entire work. It is only necessary to announce the advent of this edition to make it occupy the place of the preceding one, on the table of every medical man, as it is without doubt the best and most comprehensive work of the kind which has ever appeared.

Notwithstanding the increased size, the price still remains only \$4.00.

F.

A new Journal at Louisville, Ky.—We see by the Nashville Journal, that Dr. D. W. Yandell contemplates the founding of a new journal of medicine in that city, to supply the place of the Louisville Review, which was

transplanted to Philadelphia and associated with the Medical Examiner. We have the pleasure of a personal acquaintance with Dr. Yandell, and know him to be admirably calculated for the task which he has in view. The readers of the Western Medical Journal, will recollect the initials D. W. Y., which appeared in that Journal, at the foot of articles which contributed greatly to the interest of its pages.

American Veterinary Journal.—We notice that the cover of our friend the American Veterinary Journal, is divested of that remarkable series of equine representations which formerly adorned it, and has assumed a less striking, but more modest and engaging aspect. Though we have not devoted especial attention to this branch, we have often read with pleasure, articles which have appeared in its pages, and those interested in such matters, are to be congratulated that veterinary science has so able an advocate in this country.

The North American Medical and Surgical Journal.—The long and now inappropriate title of this excellent Journal, will be changed in the succeeding volume, and the January number will appear under the title of the Chicago Medical Journal. Chicago can now hardly be called the North-West, as it was when this Journal was instituted; this change in the name therefore, seems to be called for. The Chicago Journal we have no doubt, will well sustain the high stand which it has taken as The North-Western.

Geo. R. Gliddon, Esq., formerly United States Consul at Cairo, Egypt, and distinguished for his contributions to antiquarian science, died at Panama, on the 11th Nov. Mr. Gliddon had been on a visit to Honduras, as agent of the Honduras Inter-oceanic Railway Company, and was on his way to the United States when overtaken by death.

Mr. Gliddon was the principal contributor to "Types of Mankind," and "Indigenous Races of Men," and a prominent advocate of the views of the new school of ethnology.—*Medical & Surgical Reporter.*

The New Year and Medical Journals.—The December numbers of our exchanges have generally contained some reference to their prospects and prosperity, appropriate to the close of a volume. Many of them have been conducted through quite a number of years and may be said to have at least arrived at years of maturity if not of discretion; the little paper which we welcome every week from Boston, has now arrived at an advanced age. The Western Lancet is also antiquated, having numbered as many as eighteen summers. The Southern Journal, The Nashville Journal, and The Medical News & Library, are our seniors, as well as the American and the New York Journals. Of all the periodicals on our list of exchanges, The American Journal is the oldest, having been issued in its new series, for twenty-two years. The North American Medico Chirurgical Review is the youngest, having just finished its first volume. This periodical is the result of a fusion of The Louisville Review, which took the place of The Western Journal, with The Medical Examiner. We see by the last number that it is about to be enlarged, and to present yearly abstracts of the American contributions to the various departments of medical science.

We are glad to see so many contributions to the periodical literature of the profession, as there have been during the past year, and we think that we have good reason to congratulate ourselves on the able list of collaborators to which our pages have been so much indebted for their interest, and which has made the task of the editors comparatively light to what it has been in years gone by. With such an array of names as we have, as regular contributors, it is impossible that this should be anything but a good Journal, even though the editor used no endeavors to render it such; very much as many diseases will pass to a favorable termination without the aid of the doctor and sometimes even in spite of him. Were our subscribers as liberal as our contributors, this would also become one of the best paying journals of its class in the country.

F.

Honors conferred upon American Physicians.—In the Med. & Surg. Reporter, we have a list of the honors conferred by the Emperor of Russia upon American physicians who served in the late war between Russia and the Allied Powers.

"Dr. E. B. Turnipseed, now of New York, a native of South Carolina, has recently received from the Emperor, through Baron Stœckel, Russian Minister at Washington, the decoration of the Russian order of St. Anne of the third class, accompanied by two medals attached to the ribbons of the orders of St. George and St. Andrew, in acknowledgment of his services during the war. The Emperor has also conferred the orders of St. George and St. Andrew upon Drs. Harris, Holt, Smith, Eldridge, Johnson, and Matthews, all American physicians, who were associated with Dr. Turnipseed.

"The cross of the order of St. Anne is a neat piece of workmanship, set in gold an enamel. The decoration of St. George is the highest military insignia in the empire, permitted only to those whose lives have been risked in the service of the Emperor. The St. Andrew ribbon is the highest civil honor. The above facts we gather from the *N. Y. Daily Times*."

We have certainly every reason to be proud of the appreciation which the services of our countrymen met with, during the last war, from Russia and the French. The restless spirit of a true American is so powerful that it cannot be subdued even by the studies and experiences of medical life, and the opportunities open to the medical man for gratifying this propensity, are so few, that a war such as the last, is a perfect Godsend. We see this exemplified in the numberless applications for appointments in the army and navy, where, on this account, the examinations have been made so rigid, and the standard of merit has been placed so high, that a comparatively small proportion are accepted. Wherever our countrymen go, however, they leave the impress of characteristic energy and zeal in doing what they have to do, as is exemplified by the gratifying testimonials which have been presented to them by the Russian Emperor.

F.

Novel Method of Extracting a Foreign Body from the Œsophagus.—

We have before us, in the pages of the Boston Medical Journal, an account of an extremely ingenious and novel method of extracting a foreign body from the œsophagus, by Dr. David Rice. "Mrs. Field, a lady aged 70, while eating chicken soup, accidentally swallowed a piece of bone the size of an American quarter of a dollar, cut into a triangular form. The bone lodged in the œsophagus, about two inches below the top of the sternum. Thinking that it might fall into the stomach, she neglected to apply for surgical aid until the fifth day after the accident. In the mean time, she had

swallowed neither food nor drink, both regurgitating back into the mouth with every attempt to do so."

The Dr. was called on the fifth day, but was unable to remove the foreign substance by any instrument which he had at his command. He finally took a piece of sponge of such a shape, as when dry, to fill about half of the tube, and introduced it rapidly in a dry state, then, by introducing a little water into the mouth, the sponge became moistened, and enlarged it to twice its natural size, completely filling the gullet. On drawing it out the bone was brought with it, much to the gratification of patient and practitioner.

There is a certain readiness of invention and expedient which is necessary to a surgeon, and without which he will often be nonplused and harrassed. The same means cannot be applied to every case, and common sense, with a share of ingenuity, frequently is all that is necessary to overcome difficulties which seem to be very great. It is desirable to have in our minds the expedients which have been resorted to by others in difficult cases, for we are liable at any time, to have a case to which they are precisely applicable. We conceive that this mode of swabbing the gullet from below upward, by introducing a dry sponge below a foreign body, allowing it to imbibe moisture and then withdrawing it, might be applicable to a great many cases where the substance could not be removed by other means. F.

Meeting of the Erie County Medical Society.—The next meeting of the Erie Co. Med. Society, will take place at the rooms of the Buffalo Medical Association, on the second Tuesday in January. We hope that members from the country will bear this in mind, and that there will be a full attendance. The oration will be delivered by Dr. Newman. F.

To Correspondents.—Occasionally, through press of business, we omit to acknowledge the receipt of matter for publication from our contributors; and as it is frequently obliged to lie over for a number or two, the authors are uncertain whether they are accepted or rejected. We would here give notice that all communications which we do not receive, will be immediately returned with an explanation of our reasons; but matter which we intend to publish will be put on file and appear as soon as we have the space. F.

Buffalo General Hospital.—After repeated attempts to organize such an institution, we have at least the pleasure to announce that one wing of the building of the Buffalo General Hospital is completed, and will probably be in readiness for the reception of patients on the first of May next. We have to-day been shown the plans, and there have been kindly pointed out to us, all the internal arrangements of this institution; and in convenience and beauty, we are convinced that it will be surpassed by few, if any, hospitals in America. There are some, of course, which are larger, but none which are better adapted to fulfill the objects for which this is intended. The entire structure will cost about \$100,000; the wing, which is now nearly finished, and which will accommodate about one-third of the number which can be received when the entire edifice is completed, has been built at an expense of about \$15,000. It is composed of a basement and two stories. The basement is cut up into kitchens, offices, rooms for the warden and physicians, etc., and the first and second stories are devoted to the sick. There are four large general wards, together with private rooms and wards, on each side of an open court: in this court is the apparatus for generating steam for heating the building, and a small engine. When this wing is in operation, as it undoubtedly will be in the spring, we will certainly have made a great and tangible advance in this public work, which has now become so desirable.

The Board of Officers is composed of Charles E. Clarke, President; Andrew J. Rich, Vice-President; William T. Wardwell, Secretary and Treasurer; and Geo. S. Hazard, Chas. E. Clarke, Andrew J. Rich, Bronson C. Rumsey, Roswell L. Burrows, William T. Wardwell, Geo. Howard, S. W. Howell and Henry Martin, Trustees. The medical staff will consist of two consulting surgeons, two consulting physicians, two attending surgeons and two attending physicians; there will also be appointed by the medical staff, two or more resident physicians and surgeons.

The by-laws have been carefully penned, and are in every way calculated to render this one of the best regulated, as well as one of the most convenient and elegant hospitals in the country.

F.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

FEBRUARY, 1858.

NO. 2.

ORIGINAL COMMUNICATIONS.

ART. I.—*Reduction of Dislocations of the Hip-Joint by Manipulation.*
Fragments of the Literature of this method. Compiled by FRANK HASTINGS HAMILTON, M. D.

(Continued from Page 330.)

“A primary luxation directly backwards was brought into the Pennsylvania Hospital last winter, and after various attempts to reduce it by powerful extension, in the different directions before described, Dr. Physick thought it probable that the head of the bone had slipped through a slit, or longitudinal rent, in the capsular ligament, and that this rent embraced it at the neck, as a button hole does a button; under this impression, after the extension had ceased, he made an abduction of the thigh, pushing at the same time the head of the bone forwards towards the acetabulum; this manœuvre in a moment succeeded without any more force than the Dr. was himself able to exert—a strong confirmation of his opinion respecting the nature of the obstacle previously existing. In all difficult cases it will be proper to try every possible motion of the limb, before abandoning the case as hopeless;

very often, after great force has failed, a gentle effort in some new direction is found successful."—*Elements of Surgery. By John Syng Dorsey, M.D. Philadelphia, 1813, vol. i, p. 242.*

This is, no doubt, the same case which has been described by Dr. James L. Phelps, of New York, who was himself a witness of the reduction. His account of the mode of procedure is taken from his notes written at the time, and is quite minute.

The patient, an athletic man, 40 years of age, had luxated his femur upwards and backwards, five hours before, on the 7th of Jan., 1811. Dr. Physick made four successive attempts to reduce it by the ordinary modes of extension and counter-extension, during which time the patient was bled from both arms to fainting. These procedures had occupied more than an hour, and the united strength of eight men had been employed. After the last effort, Dr. Physick having waited a moment contemplating his exhausted patient, "took hold of the limb and brought the thigh up to a little more than a right angle with the body, and then gave it an outward circular sweep." At this moment the bone slipped into its socket with a visible muscular action.—*Transactions of the New York State Medical Society, for 1856, p. 169 et seq.*

Before describing the method recommended and practised by Dr. Nathan Smith, it will be proper to give a brief epitome of the history of this distinguished physician and surgeon; especially since in the writings of his no less distinguished son, Dr. Nathan R. Smith, of Baltimore, will be found the most minute and elaborate description of the method of reducing dislocations of the hip by manipulation, which up to that day, had been written, and the discovery of which method is by the son attributed to his father, Dr. Nathan Smith.

He was born in Rehoboth, Mass., on the 30th of Sept., 1762. While he was yet young, the family removed to Chester, Windsor County, Vermont, where his parents remained until their death. His early life was passed upon a farm, and chiefly in agricultural pursuits; but before he arrived at the period of manhood, he joined a body of Vermont militia, enlisted to repel the incursions of the bordering tribes of Indians. At the age of 27 years, having already acquired a thorough academical education, he commenced the study of medicine in the office of Dr. Goodhue, of Putney, Vt. He subsequently received the degree of Bachelor of Medicine from the University of Harvard, at Cambridge.

In — Dr. Smith founded a medical department in connection with

Dartmouth College, at Hanover, in New Hampshire. Soon after he visited Great Britain, spending about a year in attendance upon the lectures at Edinburgh, and in the hospitals of London. On his return he continued to lecture at Dartmouth until the year 1813, when he accepted a professorship in the Medical Institution of Yale College, at New Haven, Ct., where he taught until the period of his death, which occurred in 1828. He was 66 years old when he died.*

"It is believed," says his son, "that he was the first in this country to perform the bold operation of extirpating the ovarian tumor. He was also the first to perform, in this country, the operation of staphyloraphy. He invented a new apparatus for the treatment of fractures. His mode of reducing dislocations of the hip is new, philosophical, and ingenious."

The only written account of his views in relation to the reduction of dislocations of the hip, which I can find given by himself, is contained in a pamphlet entitled "*Report of the trial of an Action. Charles Lowell against John Faxon and Macajah Hawks, Doctors of Medicine, defendants, for malpractice in the capacity of Physicians and Surgeons, at the Supreme Court of Maine, holden at Machias, for the County of Washington, June term, 1824. Before the Hon. Nathan Weston, Jun., Justice of the Court.*"

This was the third trial of the same action, and the case being one of great importance to all parties, the depositions of several distinguished surgeons were obtained, among which we find the deposition of Dr. Nathan Smith, and so much of which as is pertinent to the object of this paper, I shall quote:

"I do not think that the mechanical powers, such as the wheel and axle, or the pulleys are necessary to reduce a dislocated hip, or any other dislocation. They have sometimes been used with effect, but they have oftener been injurious, and what can be effected with them can be effected without them. It is not the quantum of force which reduces the dislocated bones, so much as it is the direction of the force; and this can be given by the hand of skill, better than by pulleys, &c. In reducing the hip-joint it cannot be done by direct pulling; but we take advantage of the thigh bone as a lever to move the head of the bone from the place where it may be lodged, and bring it into its former situation. In some cases the fulcrum is some of the bones of the pelvis; in others we have to supply it by some external body.

* Biographical Memoir. By Jonathan Knight, of New Haven.

"*Question by defendants' attorney.* Did you ever reduce a dislocated hip? and if so, please to state the manner.

"*Answer.* I once reduced a dislocated hip-joint. It was dislocated upward and backward; and after pulling it in every direction but the right, it was reduced easily by carrying the knee towards the patient's face. I had the assistance of two men only."

This deposition was made about four years before his death, and we cannot now ascertain whether he ever had another opportunity of reducing a dislocated hip, and of determining again the value of this method; nor do we know at what period of his life the case occurred to which he here alludes.

Dr. Samuel Shumway, of Essex Co., N. Y., in a communication made to the New York Medical Society at its annual meeting in Feb., 1854, reports a case in which he had reduced an upward and backward dislocation of the hip, by flexing the leg on the thigh, the thigh on the pelvis, and then carrying the limb diagonally to the opposite side, from whence it was brought outwards and downwards. Which method, he affirms, was taught him by Dr. Nathan Smith, while he was a student of medicine at Yale College, during the session of 1815-16. He had seen Dr. Smith demonstrate it to the class on the skeleton. — *Transac. of the N. Y. State Med. Soc. for 1854, p. 55 et seq.*

Many other physicians and surgeons in different parts of the country have described also to the writer a mode of reduction essentially the same as that which was recommended by Dr. Smith, and which, they affirm, was learned from him.

In the year 1831, Dr. Nathan R. Smith, of Baltimore, the son of Dr. Nathan Smith, and the present professor of surgery in the University of Maryland, published in an octavo volume some of the manuscript writings of his father, and also an account of what he believed to be his father's mode of reducing dislocations of the hip, for which latter he was, however, obliged to trust entirely to his memory. The essay is comprised in twenty pages, and is composed chiefly of arguments intended to prove that the muscles are the chief agents in producing these dislocations, and that they may also be employed efficiently in accomplishing their reduction. The action of the muscles is still further explained and illustrated by several wood cuts. From this essay I shall only quote the concluding pages.

"Proposed Method of effecting the Reduction of the Os Femoris, Dislocated upon the Dorsum Ilii.

"Professor Nathan Smith used to relate, in his surgical lectures, a case of dislocation of the os femoris on the dorsum ilii, in which he promptly succeeded by the mere force of hands, in effecting the reduction. Notes of this case unfortunately I am not able to discover among his papers. The principal facts, however, are fresh in my memory, and will undoubtedly be borne in mind by many who have listened to his instructions.

"After attempting the ordinary methods by extension, in vain, he bent the leg upon the knee, seized the leg, and using it as a lever, rotated the thigh a little outward. Then he gently abducted the thigh, and lastly flexed it freely on the pelvis, by carrying the knee toward the face of the patient. These movements instantly succeeded, and with but little effort of strength.

"A medical gentleman of Massachusetts, who had been a pupil of my father, saw a similar case of dislocation—practiced the same method, and succeeded with equal facility. A letter from him to professor Smith, detailing the particulars of the case, I once saw, but unfortunately it cannot be found.

"The case quoted above, in which professor Physick succeeded in effecting reduction by a gentle abduction of the thigh, was one of dislocation backwards, behind the posterior border of the acetabulum. The case in which my father succeeded, was one of dislocation on the dorsum ilii, and he accomplished the reduction by a compound movement. The free flexion of the thigh forward on the pelvis, would have the effect, by calling into exercise the gluteus maximus, to throw the head of the femur downwards, behind the border of the acetabulum, precisely in the position in which it was fixed in professor Physick's case. The rotation of the thigh outward, and the abduction of the member must, as can be anatomically demonstrated, have thrown the head of the bone forward into the acetabulum. When the bone is dislocated on the dorsum, the trochanter is dragged forward, the femur rotated inwards, and the head and neck of the bone are applied flatways on the pelvis. The rotation of the limb outward would, therefore, throw the trochanter outward, and cause the head to present in an attitude favorable to its entrance into the acetabulum. The abduction of the bone at the same moment, would have the effect to call powerfully into exercise the adductor muscles which come from the anterior part of the pelvis, and are inserted into the linea aspera. The strong effort of these muscles will necessarily tend, when this movement is made, to drag the head of the bone directly forward and downward, into the acetabulum. If we consider these

muscles to represent the power, the hand of the surgeon (abduction being completed) applied to the knee, will be the fulcrum, or centre of motion, and the resistance is at the head of the bone. The adductor muscles will then act on a lever of the third kind; but, acting near its extremity and nearly at right angles to it, will exercise a power far greater than muscles ordinarily do—far greater than those muscles themselves do in the ordinary exercise of their functions. The effect of their contraction, then, as they will be much excited, must be very great, in aiding the reduction.

"If, while abduction is being made, we regard the hand of the surgeon at the knee as the power, then do the tense abductor muscles furnish the fulcrum, and the head of the bone, the resistance. The power exercised by the surgeon then operates upon far the longest arm of a lever of the first kind, and therefore with great mechanical advantage, in throwing the head of the bone toward the acetabulum.

"It should be particularly noticed that, while this compound movement of the bone thus calls into exercise, with their utmost power, the muscles which aid the reduction, it most effectually relaxes those (the glutei) which tend to resist it, and which were instrumental in effecting the dislocation. It will be observed that these, as well as all the other muscles inserted into the upper portion of the bone, must powerfully resist when the reduction is attempted by direct extension. Two very important objects then are at once accomplished: 1st, we call the adjuvant muscles most powerfully into exercise; 2d, we effectually avoid the resistance of those muscles, the action of which is by all surgeons regarded as the chief impediment to the reduction of all difficult dislocations.

"As I before remarked, the cases in which lateral movements with gentle force have succeeded, either by design or fortuitously, in promptly reducing dislocations which have resisted more powerful means, induce me to believe that there is a secret method in which we may uniformly thus succeed; and that method I believe to be the one in which the movements described above are employed. This I infer from facts which I have stated, and from the anatomical mechanism of the joint and appendages.

"The practical precepts derived from the above, are concisely these. The patient being prepared for the operation by whatever means may be deemed necessary, may be placed in an attitude convenient for the operation with the body securely fixed, by placing him in the horizontal posture, on a narrow table covered with blankets, and on the sound side. To the table his body should be firmly fixed, and this can be conveniently done by folding a sheet several times, length-ways—then applying the middle of the broad

band thus made to the inner and upper part of the sound thigh—carrying its extremities under the table, crossing them beneath it, and then carrying them obliquely up and crossing them firmly over the trunk, above the injured hip. The ends may then be secured beneath the table. To support the trunk the more firmly, a pillow may be placed on each side of it upon the table, and be included in the bandage. Should the operator design to employ any degree of extension, a counter-extending band may be placed in the perinæum, and carried up to the extremity of the table, be fixed to some more firm body, or held by the hands of assistants.

“The operator now standing on the side to which the patient’s back presents, grasps the knee of the dislocated member with his right hand, (if the left femur be dislocated—vice versa, if the right) and the ankle with the left. The first effort which he makes is to flex the leg upon the thigh, in order to make the leg a lever with which he may operate on the thigh-bone. The next movement is a gentle rotation of the thigh outward, by inclining the foot toward the ground, and rotating the knee outward. Next the thigh is to be *slightly* abducted by pressing the knee directly outward. Lastly, the surgeon freely flexes the thigh upon the pelvis by thrusting the knee upward toward the face of the patient, *and at the same moment the abduction is to be increased.*

“Professor N. Smith regarded the free flexion of the thigh upon the pelvis as a very important part of the compound movement. He believed that it threw the head of the bone downward, behind the acetabulum, where the margin of the cup is less prominent, and over which, therefore, the adductor muscles would drag it with less difficulty into its place.

“The operator may slightly vary these movements, as he increases them, so as to give some degree of rocking motion to the head of the os femoris, which will thereby be disengaged with the more facility from its confined situation among the muscles.

“Should the operator deem it necessary to conjoin extension with these efforts, a band may be attached above the knee, in the usual manner. With this, extension is made horizontally—in the direction in which the bone presents. Then it is directed a little outward, so as to favor the necessary rotation and abduction. Lastly, it is made in a direction obliquely upward from the table, in order to favor the flexion upon the thigh. This last extending effort may be made by an assistant standing on the table, near its foot, with a band thrown round his neck and shoulder, and attached to the limb in the usual way. When the head of the bone is supposed to be approaching the cup, an assistant may press with his hands firmly upon the

trochanter, downward and forward, toward the acetabulum, thus aiding the effort of the muscles.

"When the femur is dislocated backward into the ischiatic notch, abduction seems to be the only movement which is necessary, since the head of the bone is already behind the acetabulum. This was precisely the movement with which professor Physick succeeded in such a case.

"Of the other less difficult varieties of dislocation of the femur, it has not been my present purpose to treat."

(To be Continued.)

ART. II.—*Fractures of the Sternum.* By FRANK HASTINGS
HAMILTON, M. D.

Fractures of the sternum are of rare occurrence, owing, probably, to the elasticity of the ribs and their cartilages, upon which it mainly rests, and also in part, to the softness of its structure. In advanced life, the ossification and fusion of all of its several portions becoming more complete, and the cartilages of the ribs also becoming more or less ossified, its fracture is relatively, more frequent.

Causes. They are generally the result of direct blows inflicted upon the part, such as the passage of a loaded vehicle across the chest, the fall of a tree or of some heavy timber upon the body; the fracture implying, always, that great force has been applied.

Indirect blows, and voluntary muscular action alone have been known also occasionally to produce this fracture.

David, in his *Mémoire sur les Contrecoups*, published as a prize essay by the Academy of Medicine, mentions the case of a mason, who, in falling from a great height, struck upon his back against a cross-bar which intercepted his fall, in consequence of which the abdominal and sterno-cleido-mastodian muscles were so stretched as that the sternum broke asunder between its upper and middle portions.* Sabatier reports another case of fracture at the same point, produced in a similar manner;† and Rolland has described

* Boyer ou Bones, p. 57.

† Malgaigne, from Sabatier, *Mem. sur la Fract. du Sternum.*

a third example in a woman sixty-three years old, who, falling from a height backwards and striking upon her back, broke the sternum near its centre.*

Cruveilhier saw a man who having fallen from a height of twenty feet upon his nates was found to have a fracture of the sternum.† Cussan saw the same result in a person who fell from a third story, striking first upon his feet and then pitching over upon his back.‡ Maunoury and Thore have reported an analagous case, where a man fell from a height of twelve or fifteen *mètres*, first striking upon his feet and then falling over upon his back and head.§ Mr. Johnson, late editor of the London Med. Chi.-Rev., reports a case of this kind, also, as having been received into St. George's Hospital, in London; the man, a healthy laborer, from the country, had fallen from the top of a hay cart, striking only upon his head. He walked with his head much bent forwards, and was incapable of either flexing, extending or rotating it any farther. The fracture was transverse, and about three inches below the top of the sternum opposite the centre of the third rib, the lower fragment projecting in front of the upper. The fragments were easily replaced by simply throwing the head back, and they fell into place with an audible snap, but they immediately resumed their unnatural position when the head was flexed. They finally united, but with a slight projection and overlapping.||

Malgaigne expresses a doubt whether all these can be considered as the results of muscular action, since in a certain number of the examples cited, the head seems to have been thrown forwards by the concussion, and in others, also, there is no evidence that the muscles attached to the sternum were put upon the stretch. The only remaining explanation is that in such cases the sternum has been broken by the violent shock, or *contrecoup*.

Seat and Direction of Fracture. The sternum is separated most frequently either in the long central portion, or at the junction of this latter with the upper portion where the bone is weakest. In fact a separation at this latter point may be regarded frequently as a diastasis or dislocation rather than as a fracture, since the two portions do not become firmly united by bone until late in life. The very late ossification and fusion of the

* Malgaigne, from Bull. de Thér., tom. vi, p. 288.

† Malgaigne, from Bull. de la Soc. Anat., juin, 1826.

‡ Malgaigne, from Archiv. de Méd., janv., 1827.

§ Malgaigne, from Gaz. Méd., 1842, p. 361.

|| London Med. Chir. Rev., vol. xvii. new series, p. 536. 1832.

xyphoid cartilage with the central piece, also, will explain the infrequency of its fracture.

Boyer believed that the xyphoid cartilage was not susceptible of being permanently displaced backwards, except in aged persons after it had become ossified, "for," he says, "though violently struck and driven backwards by a blow on what is vulgarly termed the pit of the stomach, yet it restores itself by its own elasticity."*

The following case, however, which has come under my own observation, is conclusive as to the possibility of this accident:

A man, twenty-eight years old, fell forwards striking the lower end of his sternum upon the top of a candlestick, breaking in the xyphoid cartilage. During two years following the accident he had frequent attacks of vomiting, which were excessively violent and distressing. The paroxysms occurring every five or six days. Both Dr. Green, of Albany, and Dr. White, of Cherry Valley, upon whom he called for relief, recommended excision of the bone, but the patient would not submit to the operation. Twelve years after the accident, in the year 1848, while he was an inmate of the Buffalo Hospital of the Sisters of Charity, I examined his chest and found the xyphoid cartilage bent at right angles with the sternum, pointing directly towards the spine. He now suffered no inconvenience from it except that it hurt him occasionally when he coughed.†

The upper portion of the sternum is rarely broken, unless at the same time the central portion is broken also.

The direction of these fractures is generally transverse, or nearly so; occasionally a slight obliquity is found in the direction of the thickness of the bone. In three or four examples upon record the direction of the fracture was longitudinal. It is not so infrequent, however, to find the bone comminuted. Compound fractures are exceedingly rare.

When the fracture is transverse, the lower fragment is almost always displaced forwards, and some times it slightly overlaps the upper fragment.

In one instance mentioned by Sabatier, where the separation had taken place at the point of junction between the first and second piece, the lower fragment was displaced backwards, and was also carried upwards under the upper fragment to the extent of twenty-eight *millimètres*.

Diagnosis. In a few cases the patients have felt the bone break at the

* Boyer, on Diseases of Bones, p. 59.

† This Journal, vol. xii, p. 282, Cases of Fractures of the Sternum.

moment of the accident. When displacement exists it may generally be easily recognized, and the lower fragment will often be seen to move forwards and backwards at each inspiration and expiration. Crepitus may also be detected in some of these examples, but it is less often present where no displacement exists. To determine the existence of crepitus the hand should be placed over the supposed seat of fracture, while the patient is directed to make forced inspirations and expirations, or the ear may be applied directly to the chest.

Emphysema has, also, occasionally been noticed, indicating usually that the lungs have been penetrated by the broken fragments.

The frequent occurrence of congenital malformations of the sternum should warn us to exercise great care in our examinations lest we mistake these natural irregularities for fractures. Bransby Cooper mentions a remarkable instance of malformation of the xiphoid cartilage which he at first suspected to be a fracture. It was so much curved backwards that, as Mr. Cooper thinks, its pressure upon the stomach produced a constant disposition to vomit whenever he had taken a full meal, or had taken a draught of water.*

Prognosis. In simple fracture of this bone, uncomplicated with lesions of the subjacent viscera, and especially where the fracture is the result of muscular action or of a counter stroke, no serious consequences are to be apprehended. The bone unites promptly even where it is found impossible to bring their broken edges into apposition. Indeed, generally, where the fragments have been once completely displaced although it is not difficult to replace them momentarily, a redisplacement soon occurs, and they are found finally to have united by overlappings: but no evil consequences usually result from this malposition. In nearly all of the cases reported in which palpitations, difficult breathing, &c., have been charged to the persistence of the displacement, the injuries were of such a character as to furnish for these unfortunate results other and much more adequate explanations. In one instance, only, already mentioned, serious inconveniences followed from a displacement of the cartilage backwards.

In other cases, however, where the fracture is the result of a direct blow, constituting a large majority of the whole number, the prognosis is often very grave: a conclusion to which one would naturally arrive from the fact already stated, that the fracture of the sternum thus produced, in itself implies the application of great force.

* B. Cooper, *Princ. and Prac. of Surg.*, p. 359.

An abscess occurring in the anterior mediastinum, and caries or necrosis of the bone are among the most common results of a blow delivered directly upon the sternum; complications which generally end sooner or later in death. Blood may be also extensively effused into the anterior mediastinum.

Where emphysema is present we may anticipate inflammation of the pleura and of the lungs.

In several instances, where death has occurred speedily after the injury, the heart has been found penetrated and torn by the fragments. Saneon and Dupuytren have each reported one example of this kind. Duverney has mentioned two, and Samuel Cooper says there is a specimen in the museum of the University College, exhibiting a laceration of the right ventricle of the heart by a portion of fractured sternum. Watson mentions a case in which the pericardium was torn, but the heart was only contused.*

Treatment. When the fragments are not displaced, the only indications of treatment are to immobilize the chest, and to allay the inflammation, pain, &c., consequent upon the injury to the viscera of the chest. The first of these indications is accomplished, at least in some degree, by enclosing the body, from the arm pits down to the margin of the floating ribs, with a broad cotton or flannel band. A single band, neatly and snugly secured, and made fast with pins, is preferable to, because it is more easily applied than the roller which surgeons have generally employed; it is also much less liable to become disarranged. It should be pinned while the patient is making a full expiration. To prevent its sliding down, two strips of bandage should be attached to its upper margin and crossed over the shoulders in the form of suspenders.

Generally the patients prefer the half sitting posture, with the head and shoulders thrown a little backwards; and this is the position which will be most likely to maintain the fragments in place, and also to secure immobility to the external thoracic muscles, while it leaves the diaphragm and the abdominal muscles free to act.

The second indication may demand the use of the lancet; but more often it will be found necessary to allay the pain and disposition to cough by the use of opium.

If, however, the fragments are displaced, it is proper first to attempt their reduction; which, as we have already intimated, is generally more easy of

* New York Journal Med., vol. iii, p. 351.

accomplishment than is the maintenance of them in place until a cure is effected.

The upper fragment may be thrown forwards, and made to resume its position sometimes by a single full inspiration; but then it usually falls back during expiration: or it may be reduced by straightening the spine forcibly and at the same time drawing the shoulders back.

Verduc and Petit proposed, in those cases in which it was found impossible to reduce the fragments by these simple means, to cut down and lift the depressed bone. Nelaton suggests the use of a blunt crotchet introduced through a narrow incision; and Malgaigne has thought of another plan, which is, to penetrate the skin with a punch, and directing it to the broken margin, to push the fragment into its place, but which he does not himself regard as a suggestion of much value, since the bone is too soft to afford the necessary resistance; and, moreover, this in common with all of the other similar methods is liable, in some degree, to the objection that it may increase the tendency to caries and suppuration, already imminent. If reduced, the fragments will probably immediately again become displaced; and more than all, it still remains to be proven conclusively, that the mere riding of the fragments is in itself ever a cause of subsequent suffering or even of inconvenience.

When an abscess has formed in the anterior mediastinum surgeons have occasionally recommended the use of the trephine. Gibson has twice operated in this manner at the Philadelphia Hospital, but in each case the caries continued to extend and the patient died; an experience which has inclined him latterly to discountenance the operation.*

There are other considerations mentioned by Lonsdale, which ought to decide us never to use the trephine in these cases. "For the symptoms denoting the presence of the abscess, when completely confined to the under surface of the bone, will be very uncertain; and, when the matter collects in larger quantities, it will show itself at the margin of the sternum, between the ribs; when it can be let out by making a puncture with the point of a lancet, without the necessity of removing a portion of the bone."†

* Gibson, *Institutes and Practice of Surgery*, vol. i, p. 269.

† Lonsdale. *Practical Treatise on Fractures*. London, 1838, p. 242.

ART. III.—*Fractures of the Inferior Maxilla.* By O. C. GIBBS, M. D.,
Frewsburg, Chautauque Co., N. Y.

The cases of fracture of the inferior maxilla, reported in the December number of your Journal by Prof. F. H. Hamilton, bring to mind a case of unusually extensive fracture of the inferior maxilla, which came under my observation some months since. The case may be not altogether unworthy of record.

April 5th, 1856, I was called to see Mr. McC., an Irish laborer, aged about 40 years. He had received a severe blow upon the left side of the inferior maxilla from a handspike, the motive power being a heavy log. He was assisting in rolling a large log upon skids, when it was carelessly rolled off the end of the skids, dropping about two feet; in the fall it struck the lower end of his handspike, knocking the end which he held from his hands, which end forcibly struck him on the side of the face and laid him senseless upon the ground.

As the patient resided about twelve miles away, I did not see him until several hours after the accident. Consciousness soon returned, and on my arrival I found the soft parts much tumefied, which, with the deformity resulting from the fractures soon to be mentioned, gave the patient a rather singular expression.

On examination, the inferior maxilla was found broken in *three* distinct places. The teeth in the upper jaw were entire, and the fragments of the bone were carefully moulded to an exact adaptation to the upper maxilla, with the design of making it subserve the purpose of an efficient splint to hold in place the fragments of the broken bone. In consequence of the great tumefaction, it was thought advisable to depart from the ordinary manner of applying bandages,—it was thought that the pressure of the bandages upon the injured side of the face would, in consequence of its swollen condition, displace the fragments of the jaw inward. To prevent this, a splint, somewhat of an horse-shoe shape, was fitted to the inferior surface of the fractured bone, projecting sufficiently beyond it on the sides to guard against lateral pressure. This splint was well padded and applied, and held in place by suitable bandages fastened to a cap of firm cloth fitted to the head. The patient was supported by liquid nourishment, conveyed to the mouth through a space left by an absent tooth. The fracture healed readily and without deformity. Suppuration of the bruised parts took place to

some extent, and one tooth and a spicula of bone were removed before perfect soundness was restored.

In the same number of the Journal referred to above, there is a passage in Dr. Nichols' report of Prof. Flint's Clinical Lectures, in regard to which I wish to add a thought. I quote the passage referred to: "In the patient who is now convalescing from typhoid fever, a somewhat *unusual*, and at first view, *strange measure*, was put in practice several days, since during the height of the fever. The patient had presented for some time previous to this, distension of the abdomen, with tympanites, accompanied with frequent liquid evacuations passed in bed. The patient was actively delirious. His pulse was not small, nor was it much accelerated. Prof. F. regarding the diarrhoea as an effort of the system to relieve the intestines of their contents, directed a *saline cathartic* to be given: magnesiae sulph., 3j, every two hours until the evening, this being about noon. The following morning, the nurse stated that two doses of the above medicine had been taken, and a copious dejection occurred during the night. Since then, and for three days thereafter, no dejection was observed. There was less distension of the abdomen, and also less tympanites, and in improvement in the condition of the patient generally." This treatment, with me at least, is not altogether new. If Prof. Flint will, in like cases, add from fifteen to twenty drops of *elixir vitriol* to each dose of the saline solution, he will have a combination, which, from my rather limited experience, he will seldom have occasion to repent the administration, under circumstances as detailed.

ART. IV.—*Abstract of the Clinical Lectures delivered at the Buffalo Hospital of the Sisters of Charity, upon the Diseases treated in the Male Medical Ward, by AUSTIN FLINT, M. D., Attending Physician, during the present College Session, viz., from October 14th, 1857, to February 27, 1858. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. III. For December.

Bright's Disease.

Two cases in which albumen was found to exist in abundance in the urine, for a considerable length of time, accompanied with more or less effusion into the areolar tissue, were presented to the notice of the class, during

the month of December, and formed the subjects of the succeeding remarks by Prof. F. in several clinical lectures at the hospital.

The fact that cases of general dropsy, were not infrequently accompanied with an albuminous condition of the urine, was known some time prior to the discovery of Dr. Bright in 1827, and that a peculiar morbid condition of the kidney was often associated with the foregoing symptoms.

This discovery, though slowly accepted at first, has become so generally known to, and appreciated by, the profession, that not a few physicians at the present time, make no distinction between the mere presence of albumen in the urine and the disease called *Morbus Brightii*. The presence of albumen in the urine does not, however, necessarily denote the existence of this disease. It is only a symptom of disease, like jaundice, denoting the presence of some morbid process in the system.

When the albumen exists in great abundance and for a length of time, accompanied with general dropsy, then we may presume there is some pathological condition of the kidney present, more especially if there be *anæmia* coëxisting.

The symptoms of Bright's Disease are various, and many of them obscure, did we not possess our present knowledge of the pathology of this disease.

It may be well, then, to offer a very brief account of the pathology of this affection. Various appearances have been described by different writers, as occurring in the kidneys of those who have died with this disease. Dr. Bright, the discoverer of this lesion, describes the degeneration as peculiar, but divisible into three forms. Dr. Christison appears to take much the same view, regarding the disease, as "granular degeneration of the kidneya." Rokitansky, from the different morbid appearances of the kidney, divides the affection into no less than eight varieties. And lastly, Dr. Johnson, observing the microscopic appearances of the urine, makes five forms of disease associated with albuminuria. Thus, the subject is seen to lose much of its former simplicity, and to become quite complicated by the various observations of modern pathologists. There are objections, even if his views be correct, for adopting the refinements of Rokitansky; and no less objectionable is it to assume differences in disease, from the various results of microscopical examinations of the urine.

It is certain that the substance of the kidney undergoes some change incompatible with the healthy performance of its function. Histologists have not as yet, fully determined upon the minute anatomy of this organ. And although nearly all authorities adopt the views of Mr. Bowman in regard to the structure and physiology of the kidney, still the subject must be consid-

ered *sub judice*. Dr. Isaacs, of the University of New York, has quite recently submitted two papers on the "Minute anatomy and physiology of the Malpighian tufts," before the New York Academy of Medicine, which have been published in the transactions of that society. The opinions therein deduced from the author's microscopic examinations of these bodies, differ materially from the views of Mr. Bowman. Whilst it remains for future investigations to settle the various points under discussion, the present physiological views may be retained.

The opinions of Dr. Johnson, a recent writer on Diseases of the Kidney, are based, as before said, on the different microscopical appearances of the urine. He divides the disease into five forms; three of these, somewhat rare in occurrence, he terms *non-desquamative disease of the kidney*, in which no casts of uriniferous tubes are seen on examining the urine under the microscope; *fatty degeneration* of the kidney, in which there exists a great number of oil-globules in the uriniferous tubes; and *waxy degeneration* of the kidney, in which wax-like casts of the tubules are visible. The two remaining varieties are much more frequently met with, and are more interesting in reference to the microscopic appearances.

The first or *acute desquamative nephritis*, is regarded as an inflammatory condition of the kidney; in the urine, are seen "epithelial casts." The exudation which has been poured out into the uriniferous tubules has coagulated; and epithelial cells cast off from the sides of the tubules by a process analogous to that of desquamation, have become entangled in the coagulum, giving to the casts, their epithelial appearance; hence, the name, "epithelial casts."

The second variety is *chronic desquamative nephritis*, succeeding the acute; and characterized by what are termed "granular casts;" the granular matter being the epithelial cells disintegrated. As this form progresses, the epithelium disappears entirely, and the cast becomes of a "waxy" appearance. These waxy casts are of two kinds, large and small. Important inferences are derived from the size of these "waxy casts," as to the extent of the disease. If large, they denote an advanced stage of the disease, from the opinion that they have been found in tubules already deprived of their epithelial covering, by the process of desquamation, consequently showing that more or less of the cortical substance of the kidney has been rendered unfit for the secretion of urine.

It is sufficient, however, for our present purposes, to know that the peculiar morbid change or changes which take place in the secreting substance of the kidney, renders the organ more or less useless in the performance of

its natural function. It produces, aside from the loss of the albumen of the blood, retention of the poisonous principles of the urine, of which urea has heretofore been supposed the most efficient.

But, anterior to the occurrence of any morbid change in the kidney, the disease no doubt involves some unknown alteration in the blood-constituents: This is shown, amongst other reasons, by the disease obeying the law of symmetry, as first remarked by Prof. F.: both kidneys being affected almost invariably, though one to a greater extent than the other.

To return to the symptoms, the connection of many of these with the morbid condition of the kidneys, is rendered quite plain, by the present pathological views. The symptoms of Bright's Disease may be considered as due to the effect of the loss of the albumen of the blood and the retention of the poisonous principles of the urine. In the category of symptoms referrible to the excessive drain of the albumen from the blood, may be mentioned, as follows: pallor of the face, due to anæmia; cedema, in the face, at first, usually; anasarca; pulmonary cedema; dropsy of serous membranes; smallness and feebleness of the pulse with not much, if any, acceleration.

The symptoms due to retention of the urea or other deleterious principles of the urine, are probably the following: epistaxis; amaurosis; vomiting and diarrhoea; neuralgia in different situations, especially in the forehead; cramps in the lower extremities; epileptiform convulsions; inflammation of the serous cavities, with effusion; coma, often sudden in its appearance.

The essential cause of the disease is as yet unknown. But, the affection in its acute form, very often follows scarlatina. In its chronic form, it is frequently found in persons who are addicted to the intemperate use of alcoholic liquors. It follows, also, exposure to changes of the atmosphere, more especially occurring during cold weather. It has been found to succeed intermittent fever, disease of the heart, and erysipelas. It occurs more frequently in males than in females; and is found at all periods of life, not excepting infancy.

The diagnosis of the disease, as far as regards the presence and amount of the albumen in the urine, is not difficult to determine in any case. The existence of a morbid change in the kidney, however, cannot so readily be predicted. For it has been seen that albumen may exist in the urine, without any lesion of the kidney; these being cases of albuminuria merely. But when the albumen continues to be present in the urine for a length of time, and in considerable quantity, especially if there coexist general dropsy and persistent anæmia, there can scarcely be a doubt, that the patient is affected with Bright's disease.

Not a few cases of this affection, even where the morbid product has invaded to a great extent, the substance of the kidney, are overlooked by practitioners who pay very little, if any, attention to examinations of the urine. Such cases present symptoms which it is impossible to connect with the renal disease, by any process of reasoning *a priori*. And yet when, by examinations of the urine chemically and also by the microscope, it has been definitely determined that the patient is affected with Bright's disease; and still farther when we remember that in this disease, two grand events are constantly going on, namely, the outpouring of more or less of the albumen of the blood, and the retention of the urea or poisonous principles of the urine; then it is that we are able to connect the singular and otherwise unaccountable symptoms so commonly presented in Bright's disease with the morbid condition of the blood and of the kidneys in this affection.

The microscope finally is no inconsiderable aid in the diagnosis of this disease. Dr. Johnson, as before remarked, has based his divisions of albuminuria on the microscopic appearances presented in the urine. And whether more or less importance should be attached to his views, the study of these microscopic casts, in connection with the symptoms presented during life, and the condition of the renal organs after death, will doubtless lead to farther information in regard to the nature of Bright's disease.

As regards the prognosis and treatment, little need be said at present. The prognosis in the acute form of the disease, is generally favorable; although, there is great liability of the affection becoming chronic. When the disease is chronic, the prognosis is almost always unfavorable; although the unpleasant symptoms of the disease may disappear for a time, eventually the patient will be carried off by some secondary disease.

The treatment in the acute form will be moderately antiphlogistic; being adapted to the particular case presented to our notice, always bearing in mind the tendency of this variety to become chronic.

When the patient is already laboring under the more advanced or chronic form of the affection, our remedial measures must still be suited to the individual case we are about to treat. If there be serous effusion in the form of anasarca or ascites, diuretics are most generally resorted to, and hydragogue cathartics and diaphoretics have sometimes been employed. Bitartrate of potassa is the form of diuretic very commonly used; and elaterium is the best hydragogue; as a diaphoretic, Dover's powder is probably the best.

After the above indication has been fulfilled, we may endeavor to diminish the outpouring of the albumen and consequently impoverishment of the blood. Gallic acid will be found highly useful as an internal astringent.

And with other remedial measures indicated in the particular case under treatment, tonics and sustaining diet, with attention to the preservation of an equable temperature of the surface of the body, together with exercise rightly managed, will constitute no inconsiderable part of a judicious and beneficial treatment of Bright's disease.

ART. V.—*Alcoholic Treatment of Tuberculosis.* By THOMAS CUSHING,
North East, Pa.

The researches of modern physiologists have led to the following conclusions with regard to the disease called tuberculosis, viz:

1. It is a blood disease.
2. The morbid condition of the blood, present in this disease, consists in an excess of albuminous, and a deficiency of fatty matters.
3. The cause or causes of this loss of balance must be looked after among those circumstances which affect the composition of the blood.

The healthy performance of the function of nutrition requires that the repair of the various tissues should at least be commensurate with the waste of the same tissues which is continually taking place; and inasmuch as this waste and repair are carried on through the medium of the blood, any disturbance of them must necessarily affect the composition of that fluid. If the elements of fat do not exist in sufficient quantity in the food taken, or if they do exist and are not properly elaborated by the digestive organs, there must, of course, result a deficiency of this substance in the blood—the waste continuing to take place at its normal rate.

If, on the other hand, the elimination from the organism of adipose tissue takes place at an abnormally rapid rate—the supply from without continuing the same, that will occasion a deficiency of this substance in the circulating fluid.

It is not my purpose to enter into a discussion of the question whether tuberculosis is caused by one or the other or both of these deviations from a healthy performance of the function of nutrition, but to discuss briefly the therapeutical action, the *modus operandi* of a medicinal agent, the efficacy of which in the treatment of this affection late experience has amply demonstrated,—I mean alcohol.

I propose first to speak of the influence which alcohol exerts upon the organism in health, and afterwards to show that its beneficial effect in the disease under consideration is due to a precisely similar action.

And here I will remark, that I am in no way disposed to undervalue the other remedial means which have been resorted to of late in the treatment of this affection, but rather to insist upon their employment in conjunction with this agent.

Let us now inquire what effect alcohol has upon the system of a person in health. Its first and most obvious effect is that of a stimulant to the brain and nervous system. By continuing the use of a given quantity daily, however, this effect is lost, or rather the brain and nervous system become so habituated to it, that under the influence of the accustomed quantity, they possess only their ordinary activity. If the quantity taken is sufficiently large, there is a marked diminution in the quantity of food consumed; in many cases not more than one-half or even one-fourth of the usual amount being taken.

Notwithstanding this diminution in the quantity of food, there is a steady and more or less rapid increase in the quantity of fat in the various tissues where it is ordinarily deposited.

Under these circumstances, one or more of the three following propositions must be true, viz:

1. The effect of the alcohol upon the digestive organs, is such that a larger proportion of alimentary matter is by them converted into fat.
2. The alcohol itself is converted into fat.
3. It prevents the elimination from the system of the fat furnished from the food.

With regard to the first proposition, I conceive that it can be true to a limited extent only; or at any rate, not to an extent sufficient to account for the phenomena observed in such cases.

It is a well-known fact that in many of these cases, we not only have no evidence of improvement in the action of the digestive organs, beyond the fact—if that is an evidence—of the increase in the quantity of fat in the system, but we have direct evidence of an imperfect performance of the function of digestion, in the existence of those symptoms which are characteristic of indigestion under all circumstances.

It may be said, that though there exist evidences of derangement in the performance of this function, yet the result of this very derangement may be the conversion of a larger than usual proportion of the food into fat.

To this, we answer, that we see the same evidences of deranged digestion in those who take no alcohol, and the consequence is a diminution instead of an increase, in the quantity of adipose matter.

As to the second proposition, I have only to say that the conversion of

any substance into fat, is a process that takes place in the digestive organs alone; and that, as alcohol is not digested but absorbed and taken directly into the circulation, this metamorphosis of it cannot take place.

If, then, it is evident that the first two propositions are false, or only true to a limited extent, and not sufficient to account for the phenomena observed, that alone would be sufficient to prove the third true, and here I might rest; but in addition to this negative evidence of its truth, I propose to adduce some positive proof that it is in this way that alcohol produces the effect spoken of.

Dr. T. K. Chambers, in his work on "digestion and its derangements," gives the results of a series of experiments performed by Dr. Böcker, of Bonn, upon himself, for the purpose of ascertaining the effect of different agents—and among them alcohol—upon the nutrition of the organism. That these experiments might show a correct result, Dr. B. first ascertained the precise quantity of food and drink necessary to "exactly cover the outgoings of the organism," and during the continuance of the experiments, took just this quantity under the same circumstances as before.

The experiments with each substance extend over a period of seven days.

The results of these experiments, in the case of alcohol, are thus stated by Dr. Chambers:

"1. Alcohol diminishes the excretion both of the solid and fluid constituents of the urine.

"2. Alcohol does not increase to any appreciable extent the cutaneous perspiration.

"3. Alcohol does not augment the fecal excretion.

"4. Alcohol diminishes not only the absolute quantity of carbonic acid exhaled by the lungs, but also the relative proportion of it in the products of respiration, though it increases the frequency of the respiratory movements.

"5. Alcohol does not affect the excretion of water from the lungs to any important extent."

The Dr.'s tables show that the diminution of urine, carbonic acid, and water, were as follows: urine $\frac{1}{8}$ of the whole average quantity of its fluid and solid constituents.

Carbonic acid $\frac{1}{3}$ less than the ordinary quantity, water $\frac{1}{15}$ of the whole—an inconsiderable amount.

The results of these experiments, which I think have been verified by others, show conclusively that alcohol affects the organism in the way spoken of in the third proposition, viz., by arresting the metamorphosis of

the tissues, and preventing the excretion or elimination of the materials which compose them.

I come now to speak of the effect of alcohol upon persons affected with tuberculosis:

The result of my own observations is, that patients with this disease will bear larger quantities of this agent, without feeling any of its ordinary effects upon the brain and nervous system than in health; and this I find is the result of the observation of others.

If the view which I take of the pathological condition in this disease is correct, and if the therapeutical action of alcohol is what the experiments alluded to seem to show, the fact of larger quantities being tolerated by tuberculous patients is easily explained. If not, I cannot account for it.

It is now generally admitted by physiologists, that the carbonic acid which is exhaled from the lungs of a person in health, is the result of a combination or union in the capillaries, of the carbonaceous matter of the tissues with the oxygen of the inspired air,—and that in this way the elimination of a large portion of this carbonaceous or fatty matter is accomplished. If a given quantity of alcohol is introduced into the circulation, a portion of it is eliminated without change, through the lungs.

During its circulation through the capillaries, however, it is brought in contact with the oxygen which the red discs of the blood have brought from the lungs, and combustion takes place,—a portion of the oxygen of the arterial blood uniting with the carbon of a portion of the alcohol to form carbonic acid, which is taken back to the lungs by the discs of the venous blood and exhaled. The portion of alcohol thus consumed in the capillaries of a healthy person is comparatively small, because the oxygen of the arterial blood finds just without the walls of the capillaries, the fat which has been elaborated from the food and deposited there, and with the carbon of this fat, it also combines.

The alcohol which is thus slowly decomposed in the capillaries, or exhaled through the pulmonary mucous membrane, is kept longer in the circulation than would be the case were it more rapidly consumed; and by being brought in contact with the entire surface of the nervous system and brain, is enabled to exert its specific influence upon them.

If, however, the same quantity of alcohol is introduced into the circulation of a person in whom there is a deficiency of fat or carbonaceous matter, the union of its carbon with oxygen in the capillaries takes place more rapidly, and less of the alcohol is left to exercise its stimulating influence. This I believe to be the true reason why alcohol exerts less of a stimulating influ-

ence upon persons affected with tuberculosis than upon others in health, and this I believe to be the *modus medendi* of alcohol in tuberculosis. According to these views, it is to be regarded not as a stimulant that exerts a temporary influence and leaves the system to suffer from the consequent reaction, nor as a vital stimulant, capable of maintaining the function of nutrition by furnishing the materials for repairing the waste of the tissues, but as an "accessory food," which, by checking this waste and economizing the resources of nature, enables the debilitated system to regain its vigor. If it be objected to the use of alcohol under these circumstances, that there is danger of its engendering habits of intemperance, I have only to say in reply, that I am not one of those who would pluck out a man's tongue through fear that "the sacred faculty of speech" might be "turned to impious use."

ART. VI. — *Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, JAN. 5, 1857.

The association met.

Present—The Vice-President, Dr. Wyckoff, in the chair. Drs. Root, Nichols, White, Mixer, Strong, Hunt, Samo, Newman, Lemon, Gay, Nott, Treat, Flint, Jr., Rochester, Rogers, Whitney, Ring, Devening, and Garvin.

A reading of the minutes of the last meeting was called for, but as they were not present, it was dispensed with.

Prof. Hunt remarked that as he would not be able to be present during the whole of the proceedings, it would, perhaps, be better to appoint a secretary pro tem.

On motion, Dr. Flint, Jr., was appointed secretary pro tem.

The committee on puerperal convulsions, asked further time to report, which was granted.

Prof. White presented an ovarian tumor which was sent to him by Dr. Ackley, of Cleveland. When it was first removed it measured thirty-six inches in its largest circumference, but it was now somewhat diminished in size. The following is a description of the case which was furnished by Mr. Garlick, an advanced student, who was present at the operation.

Miss —, æt. 34 years, came under care of Dr. A., having a tumor of large size situated in the abdomen, and which was evidently ovarian. Patient was in excellent health, and there was no evidence of malignant dis-

case. Although informed of the severe nature of the operation, she desired its removal, which was accordingly done six weeks ago to-day.

Patient having been placed on a table, and all things put in readiness, she was brought under the influence of chloroform to insensibility; an incision was then made from umbilicus to symphysis pubis in a direct line. There was a very considerable amount of adipose tissue to be gone through before reaching the peritoneum—fully two and a-half to three inches. The peritoneum being divided to the whole extent of the first incision, the tumor presented itself in plain view; an opening of small size was then made in the tumor, and a thick glairy fluid flowed rapidly from it, until by this means it became reduced in size, and by a sudden movement of the patient, was forced out through the incision, so that by its own bulk, it prevented any of the fluid from getting within the abdominal parietes. After all, or nearly all, of the fluid had come away, the tumor was found to be attached by a small pedicle, about which a very strong ligature was placed, and the tumor removed at its neck. In closing the wound a few sutures were used, and the ligature which had been placed about the pedicle of the tumor, was brought forward and fastened by one of the sutures at the lower part of the incision.

Calomel and opium were given to the patient, as symptoms seemed to indicate, for the next six days, at the end of which time her bowels were moved, but not before. The calomel was then discontinued, but small doses of opium were still occasionally given.

Patient did not suffer a great amount of pain. Considerable pus was evolved, apparently from the incision, but this discharge at length ceased, and in four weeks from the time of operation, the patient was able to sit up in her room for a while each day, and was rapidly convalescing.

The tumor removed, measured thirty-six inches by its longest circumference, but has since shrunk four or five inches.*

This is the sixth case which has been operated upon by Dr. Ackley, in four of which he has been successful, and in two, unsuccessful.

When this subject was brought up at a former meeting of the association, Dr. White was not in favor of the operation, and conceived that the chief objection lay in the great difficulty of diagnosis; in the first place the dis-

* The letter of Prof. Ackley to Dr. White, was handed to one of the editors of the Journal, but was mislaid, and cannot be found; the notes of the case by Mr. Garlick, and the description by Dr. White, embody all the facts of the case, though we regret that we are unable to present the original letter from Dr. Ackley.

crimination between ovarian disease and intra-uterine tumor; and again between the unilocular and multilocular variety of tumor. Mr. Clay, of Manchester, has made mistakes in the diagnosis of this disease, and after opening the abdominal cavity, has found that there was no tumor of the ovary. Ordinary surgeons cannot pretend to greater skill than Mr. Clay, and it would be an extremely mortifying and embarrassing thing for a surgeon to make the operation and find that he had been mistaken in diagnosis.

The question now arises, what can we do in such cases? Remedies, it is well known, are inefficacious; we may employ sorbefacients and diuretics, but the fluid cannot be removed, because the lining membrane of the walls are not supplied with absorbents. We have, then, two alternatives, namely, tapping and removal. As all therapeutical measures are useless, we cannot dismiss this operation entirely. A cure may be effected by the production of inflammatory action. Dr. White related a case where inflammation followed injury inflicted by a fall upon the abdomen. In this case the diagnosis was doubtful; a tumor occupied the abdomen, and the patient met with a severe fall, striking upon the abdomen; peritonitis followed, and she was permanently cured. This was effected in the same way, as a bursa is cured by a sharp blow, thereby causing a rupture of the walls, with escape and absorption of the contained fluid. The simple operation of tapping is not entirely without danger, two out of ten cases being followed by a fatal result. We are unable to determine whether the tumor consists of one, or many cysts, and in performing this operation we must be guided in a great measure by this circumstance, as in tapping a multilocular tumor we do very little good, being able to open only one of the cysts, and the others gradually enlarging to fill up the space. A mode of treatment adopted by some, is the injection of stimulating fluids into the cavity and the exciting of inflammation, in the same manner as we cure an effusion of fluid into the vaginal tunic of the testicle in hydrocele.

The statistics which Dr. W. has now at his command, show eighty-nine cases of extirpation, thirty-four of which proved fatal. The members will probably be surprised, in looking at the statistics of other operations, which are admitted to be perfectly justifiable, to find how large a proportion of cases terminate fatally. All operations are attended with some danger. Out of 853 amputations reported by Malgaigne, including even, amputations of fingers and toes, 332 died, making a proportion of about four in ten, about the same mortality as in the operation under consideration. In cases of amputation of the thigh, we have a mortality of 7 in 10. In 554 operations for hernia, 260 died, making a proportion of 7 in 10. If it were not

therefore, for the great difficulty in diagnosis, this operation would seem to rank with operations about which we have no doubt as to their safety and justifiability. There is another method of treatment which has not been mentioned, and which consists in the establishment of a fistulous opening into the peritoneal cavity, so that the fluid may come into contact with the absorbents with which this membrane is so richly endowed, and be thus removed.

Dr. Flint, Jr., presented specimens of scales of bone which he removed from the posterior part of the falx cerebri, on the inner surface of the dura mater. These specimens were examined by him under the microscope, and found to consist of true bone.

Rokitansky mentions these formations as being quite common, and usually found in the situation from which this specimen was removed. They are ordinarily considered to be attached to the dura mater, but Rokitansky thinks that they are attached to the parietal arachnoid.

Prof. Hunt presented a table for medical and surgical statistics, from the Medical Society of the State of New York. It is intended that a copy of this table shall be placed in the hands of every regular physician in the state, for the registration of disease, beginning from the first of January. At the end of the year, this record should be returned to the society, or to the secretary of the State society. The table is accompanied by a full set of explanations and directions, and will be the means of arriving at most useful results. Prof. Hunt also presented a number of valuable pamphlets to the library of the association, which were received, and a vote of thanks passed.

On motion, *Drs. Strong, of Chatauque Co., and Orton, of London, England*, were invited to participate in the discussions, etc., of the association.

Prof. White presented to the association two letters from *Dr. Congdon*, which were accompanied by two interesting specimens.

JACKSONVILLE, TOMPKINS CO., N. Y.,
December 22d, 1857.

DR. WHITE,

Dear Sir: You will find enclosed a pathological specimen, of which the following is a brief history:

Miss —, aged 40, of a large stout frame, and of a wealthy and esteemed family, says that she has been troubled for twenty years with vaginal leucorrhœa, attended, she has been told by physicians, with retroversion of the

uterus, says that she has suffered much from "bearing down pains," so much so that at times she has not been able to walk about her room. Has been "regular" most of the time, till within the last year, in which she has been quite "irregular." Has generally suffered much pain during menstruation. Has had some severe fits of sickness: "liver complaint," of course, has been one of her most prominent ailments. She has been treated by various physicians and quacks, sometimes being benefited and sometimes injured.

I saw and prescribed for her for the first time, Nov. 25, 1857, at which time she was suffering from all the symptoms attending both vaginal and uterine leucorrhœa; walked about her room but little, and that with the greatest care. Being naturally of a plethoric habit, her appearance was not extremely anæmic.

I prescribed citrate of iron dissolved in a decoction of some of the vegetable tonics and an injection of arg. nit., grs. xx— ʒi , to be used every third day, with a ʒiv glass syringe.

The patient being some eight miles from me, I did not see her again until Dec. 4th, at which time she says the discharge from the vagina was very large the first time she used the arg. nit., and resembled curdled milk, among which she found strips of membrane; says she feels better.

Made no alteration in the prescription, excepting same mild laxative, and the arg. nit. to be used gr. x— ʒi , with injections into the vagina of tepid water, once or twice a day.

Dec. 10th. Says she feels much as after my last visit, and shows me a pathological specimen similar to the one I send you, which she says passed the vagina on using an injection.

Prescription continued.

Saw her again to-day, Dec. 23d. She reports better, and shows me three such specimens as I send you, and says that she has passed some six or seven in all, four or five of them being perfect, the others more or less torn.

The specimen I send you, when first passed, would hold water, but its walls have adhered in drying. In some of them the walls are much thicker. The paper to which this specimen adheres, is exactly the shape of the specimen, so if it should get broken before it reaches you, you will have its shape. She says the day before passing these she has pain, similar to labor pain, I should judge by her description.

Such specimens may be common, but I do not think that physicians often see them. I have seen portions of such membrane before, but never any so perfect.

I wish that you would exhibit it before your medical association, that I,

as well as the rest of the profession may be benefited by your discussions, through the Buffalo Medical Journal.

Yours in haste,

L. CONGDON.

JACKSONVILLE, Dec. 31, 1857.

PROF. WHITE,

Dear Sir: * * * * That you may be better acquainted with the case, I send you its history for the past week. I visited her yesterday; says she feels better; has thrown off two such membranes as I sent you, during the past week, making some eight or ten that have been thrown off in about thirty or thirty-five days, (I intend to obtain the exact data of each.)

This case, it appears to me, plainly disproves the respective positions taken by Professors Simpson and Deman on this subject. Dr. Churchill says, *probably* Dr. Locock is right in *supposing* it to be the result of an inflammation of a *peculiar* kind, and concludes by admitting that *probably* he (Churchil) do n't know much about it.

I much regret that there is so little positive testimony recorded in relation to the pathology and treatment of such cases. There may be more recorded than I am aware of, but all authors that I now have access to, are quite speculative on this subject. I am sure the subject is of sufficient importance to demand much observation and research, for there is no greater scourge undermining the health of our females than those diseases that pertain to the uterine organs.

Please find within another specimen presented me to-day by another patient whom I have been treating the past year for dysmenorrhœa and leucorrhœa. This patient, married, aged 26, a farmer's daughter, quiet in her habits and of high respectability, never borne children, has generally been healthy, with the exception of the dysmenorrhœa, which has always been quite troublesome, and more recently very serious, accompanied, or rather preceded and followed by leucorrhœal discharges.

She has frequently shown me shreds and pieces of membrane during the past year, but has never discovered anything perfect like the one I send you until to-day.

In both of the above cases the size of membrane would indicate an enlargement of the uterus, which is undoubtedly the case in the first, but the symptoms in the second are not so indicative.

Both these cases are now under the following treatment: Daily ablutions of warm water, internal use of citrate of iron, iodide of potassium, and mild

laxatives. Injections of nitrate of silver and tannic acid, sufficient to keep the vaginal leucorrhœa in check. * * *

Respectfully yours,

L. CONGDON.

P. S. The within membrane first thrown off, was perfect even to the cervix uteri.

L. C.

Prof. White remarked that it is now the generally received opinion, that the membrane which we find frequently, if not always, thrown off in dysmenorrhœa, is identical with the deciduous membrane of pregnancy. The old idea, that this membrane was formed by a plastic exudation on the internal surface of the uterus, is now entirely abandoned by the most reliable authorities on this subject, and it is now fully conceded that it is produced by a hypertrophy of the mucous membrane of the uterus, which takes place at every menstrual period. When the ovum is fecundated, this hypertrophy, instead of ceasing at the expiration of the menstrual function, goes on, and forms the decidua vera, offshoots of which enclose the ovum and form the decidua reflexa. By reference to the letter of Dr. Congdon, it will be seen that membranes like the first specimen, were thrown off about every five days.

Dr. White is of the opinion that there is a form of inflammation of this organ, which is attended by a formation of false membrane, like the membrane of true croup, which is formed and thrown off repeatedly. From the fact that this membrane is thrown off at such short intervals, it would seem that it was of that character. A portion of the first specimen was given to Dr. Nichols, but he only subjected it to a cursory and hurried examination, and from his investigation was not able to satisfy himself of the presence of any of the prominent characteristics of mucous membrane. The second specimen, he had no opportunity of examining. The second specimen, on the other hand, is thrown off during the menstrual period, and is accompanied by dysmenorrhœa, which would indicate that it is a true decidua, cast off and regenerated in the manner previously described. The fact of this periodical loss of mucous membrane which the uterus sustains, more particularly at parturition, probably induced some of the older anatomists to hold the opinion that this organ was not supplied with mucous membrane; as at this time the muscular fibres are entirely denuded. These specimens are of great interest, and Dr. White takes great pleasure in being able to present them to the society.

[These specimens have been subjected to further examination in the following manner, and with the following results: A small portion of each

was put into a slightly saline solution in different vessels, and allowed to remain for twenty hours. The fluid consisted of water with a little salt, merely enough to give a saline taste. At the end of twenty hours, a small portion of the first specimen was removed from the solution and placed between two plates of glass. In doing this, a portion of the membrane was carefully spread out, and a small portion gently torn by dissecting needles; this was then moistened by the fluid in which it had been soaked, and subjected to examination with a magnifying power of 284 diameters (Nachet's large instrument.) On bringing the object into focus, a large quantity of pavement epithelial scales were seen, which were exceedingly distinct and beautiful. These were observed detached and isolated in that portion of the specimen where the membrane had been lacerated by the dissecting needles. On removing the field to this portion where the membrane had not been disturbed it was found to be entirely covered by the polygonal plates of tessellated epithelium; no trace of the fibrillation of plastic matter was observed in any portion of the specimen; thus conclusively proving that it consisted of an exfoliation of true mucous membrane. This specimen was somewhat discolored, probably by the injections of nitrate of silver which had been made use of during the treatment of the case.

The second membrane was then examined in the same way, and found to consist of the same materials. The tessellated epithelial scales were here even more beautifully apparent, as this specimen was free from discoloration.

These examinations were made in the presence of, and confirmed by Drs. White, Flint, Jr., Nichols and Orton, and Mr. Mason.

In examining the first specimen, which was thrown off every fourth or fifth day, we did not expect to find the evidences of mucous membrane, as it seemed improbable that it could be regenerated and cast off at such short intervals. It was on this supposition as well as the non-appearance of epithelial scales, on the first superficial examination, that Prof. White conceived that this was an illustration of his theory of diphtheritic inflammation of the uterus. The facts which are disclosed by the microscope, however, do not disprove this theory, but they merely show that this particular case is not an example. If we had found the appearances of coagulated fibrin, with a few epithelial scales, we might have supposed that the appearance of epithelium was merely accidental, and that it had been brought away with the exudation; but this was not the case; all that appeared under the microscope, was epithelium, and epithelium in situ, (that is, applied to its basement membrane in layers, and formed into polygonal plates by mutual compression;) with the basement membrane. The appearances, indeed, were con-

ceded by all present, to be a beautiful example, and such as it is rarely our good fortune to see, of the anatomy and mode of application of the epithelial covering of mucous membrane.

In the examination of the second specimen, the microscope disclosed precisely what we expected to find. This you will recollect was thrown off during menstruation, and was accompanied by dysmenorrhœa; and in such cases we generally, if not always, have an exfoliation of the proper mucous coat of the uterus. r.]

Dr. Wyckoff then remarked, that by the records of the Boston Society for Medical Improvement, as published in the Boston Medical and Surgical Journal, a few weeks since, he saw the propriety of operating for the relief of imperforate anus and rectum is called in question; and it is even urged by some of the members that it is better that a child should die than that an operation should be attempted. Successful cases have since been reported, however, through the same Journal. He would also submit a case of

Imperforate Rectum; Operation successful.

Mrs. R., of Buffalo, was delivered, June 15, 1857, of a plump healthy female child; labor natural and easy.

June 16. I was informed by the nurse that the child had had no evacuation from the bowels. I ordered injections, but found that they were not retained, but were followed by violent straining, which produced redness of the face and vomiting of yellow matter. When upon introducing first the probe and then the finger, I found the rectum obstructed about an inch from the external surface, by a firm membrane that protruded downward by the forcing efforts of the child.

June 17. Dr. Hamilton in consultation. After examining the case, an operation was decided upon, and Dr. H. operated by carrying a sharp pointed bistoury upon the finger to the membrane and cutting it freely from before backwards; whereupon an immense passage of meconium followed. The opening was farther enlarged by making a crucial incision, and passing the index finger oiled. On finding it impracticable to retain a bougie or anything of the kind to prevent contraction while healing, it was determined to leave it alone until the third day, when the index finger, oiled, was passed, and broke up the adhesions already formed; this gave the child much pain, and was followed by painful passages; the passage grew more and more painful and smaller, until the 29th of June, when there was no passage at all.

June 30th. Upon an examination with the finger I found the passage

closed, when I passed a probe pointed bistoury and separated the parts freely, laterally and posteriorly; the child was again relieved by passing large fecal stools.

The child grew as fast and seemed to be doing as well as other children of its age, until the 12th of July, when the stools were observed to be smaller and frequent, accompanied by great tenesmus and crying; the abdomen became much swollen and tender, which continued with all the symptoms growing worse daily, until

July 18th. When Dr. Hamilton again operated by cutting the parts freely, both laterally and posteriorly, which gave the child perfect relief.

No unpleasant symptoms followed the last operation.

Dec. 7th. Examined the rectum by passing the finger, and found a thin membrane about three-quarters of an inch from the surface, through which the finger would pass readily. The child is in perfect health and has no difficulty whatever in passing feces.

Prof. White remarked, that the case reported by Dr. Wyckoff was certainly a suitable one for an operation. He had seen two cases operated upon by Paul Dubois, one of which terminated fatally. He had seen another case in this city, which was under the charge of a German practitioner. Dr. White was consulted, and as soon as he was aware of the nature of the case, advised an immediate operation; the child expired, however, on its way to the office. Dr. W. cannot conceive that it is justifiable to allow an infant to perish without giving it the chance of life which will result from an operation.

Dr. Strong, of Chatauque Co., said that he had read the discussions which appeared in the Buffalo Medical Journal, in reference to fracture of the skull accompanied by hæmorrhage from the ear. Four cases had come under his observation, of hæmorrhage from the ear, as the result of a blow. In three of these cases, the hæmorrhage occurred from both ears; and in one, from only one ear. All of them recovered. One of these cases was accompanied by strabismus, which continued for two days, and was followed by double vision, lasting for a few days more. In these cases the Dr. was not able to detect any fracture, and as they all terminated in recovery, the occurrence of hæmorrhage from the ear is certainly not a fatal sign.

Dr. Strong, of Buffalo, asked the opinion of the association in relation to the operation of tracheotomy in cases of true croup. It seemed to him that the hands of the profession were tied in these cases, and that there was

nothing for the physician to do, but to look on and see his patient pass out of the world. It certainly seems as though something should be done, but the opinion of the profession is so uniformly opposed to the operation, that it is an act of the greatest responsibility to attempt it. Some surgeons, indeed, uniformly discountenance it and will perform it under no circumstances whatever. In a case which would be inevitably fatal, without an operation, it would appear that the operation of tracheotomy would be justifiable, as giving the patient some slight chance of life. Dr. S. had a case of true croup last summer, where the father of the child was much distressed because the Dr. would not consent to perform the operation.

Prof. Rochester remarked that it would be well to refer this subject to a committee.

Prof. White was not aware that this operation was so generally discountenanced, as was implied by Dr. Strong. He conceived that it was generally opposed by parents, until it was too late. Trousseau has operated in more than 100 cases, in one half of which the operation was successful. Dr. White had seen him operate upon two cases. One of the great reasons why he thinks that the operation is not more frequently made, is that the parents are usually unwilling; another reason is, that the good results which have followed the application of nitrate of silver, have rendered the use of this measure so common, that it has kept off the operation until it is too late.

Dr. Strong replied that the cases which demanded an operation, were in young children, of from one to two years old: the case which he mentioned was a child four years of age.

Some discussion then arose concerning the application of nitrate of silver to the laryngeal mucous membrane. Dr. White thought that there was no difficulty in introducing the probang, if the finger be used as a guide, thus conducting the sponge to the rima glottidis. Another method is to seize the tongue by means of a dry linen cloth, and pull it forward.

Prof. White moved that a committee of one be appointed to report on this subject, which was carried.

The chair appointed Dr. White, who declined. The chair then appointed Dr. Rochester.

Dr. Strong wished to know the sentiments of the members of the association in regard to the dinner of the Erie Co. Society, whether it would be thought advisable to omit it for this year. This suggestion met with no response, and it was concluded that the members were willing to have the dinner as usual.

The treasurer, Dr. Newman, suggested that the rent would soon become due, and that there would not be sufficient funds in the treasury to meet it. He stated that many members were in arrears for dues.

Prof. Hunt stated that extra copies of the transactions of the association could be worked off at very small cost when they were set up for the Journal, and that it might be desirable that these should be collected and bound for the use of the association and its members.

No action was taken on this proposition.

The association then adjourned.

AUSTIN FLINT, JR., M. D.,

Secretary *pro tem*.

ART. VII.—*A Theoretical and Practical Treatise on Midwifery: including the Diseases of Pregnancy and Parturition, and the Attention Required by the Child from Birth to the Period of Weaning.* By P. CAZEAUX, Member of the Imperial Academy of Medicine, etc., etc. Second American, translated from the Fifth French Edition. By WM. R. BULLOCK, M. D. Philadelphia: Lindsay & Blakiston. 1857.

The work which we have before us, has been gradually enlarged, and brought up to the present time in all its particulars, until it now makes a noble volume of one thousand pages, and is certainly the most complete treatise on midwifery and diseases of parturition, in the English language. A translation appeared in 1850, from the second French edition, by Robert P. Thomas, M. D., with which most of our readers are undoubtedly familiar; the present translation is made by Dr. Wm. R. Bullock, from the fifth French edition, the entire work having been carefully revised and a section added on hygiene of children, from the period of birth to weaning; and lastly, "an appreciation of the use of anæsthetics in obstetric practice." The advantages which the French enjoy for the study of this department are very great, and this, combined with the great research and labor which has been brought to bear upon embryology or the function of generation, would lead us to expect in a work intended to embrace all that this work does, a completeness which it is difficult to attain in the other practical departments. For example, in treatises on practical medicine or surgery, it is impossible that the entire ground should be occupied, except in volumes whose ponderous bulk renders them formidable to the brain and purse of the student or practitioner. This object, which it is so desirable to attain in every depart-

ment, has been most successfully carried out in the present work; and the reader will find, not only a recapitulation of the most rational and best sustained views of those who have attained distinction in this particular field, but he will receive them, when adopted by the author, with the endorsement of practical test which he has been enabled to apply, by his position in lying-in hospitals. By reference to the preface, we see that the author, in acknowledging aid from various sources, is not insensible of the valuable contributions of our own countrymen, Meigs and Dewees.

The length of time during which this work has been before the American profession, and the favorable manner in which it has been received, render a close and analytical review entirely uncalled for; but the great additions which have since been made, and the fact that it has passed into the hands of another translator, render it our duty as well as our pleasure, to present to our readers a slight analysis, and to notice somewhat the important matter which has been added to the first American edition.

The treatise is divided into six parts; beginning in Part first, with the anatomy of the parts concerned in generation and parturition. Of this little need be said. The anatomy of a woman is the same as it was when the first work was written on midwifery, and though of course, it was not as well understood and described as it is at present, yet the parts were there inviting investigation. The facts of anatomy which are disclosed by the scalpel and microscope, are now pretty well established, thanks to the labors of Bichat and his followers; and M. Cazeaux has embodied in his anatomical considerations, all the known facts in relation to this part of the subject. We cannot pass over this section, without referring to the admirable figures with which it is illustrated. The figure representing the uterus and its appendages, is the only one which we have seen, which gives anything like a definite idea of the natural appearances; and this is only one of numerous illustrations to which nearly the same remarks are applicable.

Having concluded the anatomy of the generative organs in Part I, and considered the "modifications undergone by the ovarian vesicles, the concomitant changes of the uterus and the corpus luteum," the author proceeds to a consideration of generation.

Part II then, commences the discussion of generation, beginning with conception, to which some pages are devoted following the changes which take place in the uterus, mammae, etc., during gestation, embracing the diagnosis of pregnancy, the development of the human ovum, anatomy of the foetus, and a consideration of the diseases of the pregnant female, uterine displacements, abortion, &c. The space devoted to these subjects is nearly

600 pages. It is not desirable to go fully into an analysis of this section, and we will therefore merely touch upon one or two points where the author seems to advocate some especially useful or original doctrine.

In speaking of the changes which the uterus undergoes during gestation, M. Cazeaux is singularly distinct and conclusive. In the natural state, the neck of the uterus has a spindle-shaped cavity, that is, there is a constriction both at the external and internal mouth, with a dilation in the centre: as pregnancy advances, there occurs *ramollissement* at the *os externum* with consequent dilation, so that when the gestation is somewhat advanced, the finger can be admitted, forming instead of a spindle shaped cavity, a cavity like a thimble. The extent to which the finger is able to pass, is a measure of the stage of gestation. During the last few weeks of pregnancy, we have this extending to the *os internum*, so that now we are able to pass the finger entirely through the neck, and into immediate contact with the membranes. This process of softening and dilation of the *os internum* goes on, assisted by the feeble contraction of the uterus, until the parturient period; and during this time the neck is never lost or swallowed up in the body of the uterus, as is supposed by some authors, but remains as distinct as ever until the termination of gestation, merely subjected to the changes which M. Cazeaux describes.

The section devoted to the physiology of generation, or the development of the impregnated ovum, is fully up to the times, and may be said to be a complete exposé of all that is known of this important subject. We would recommend this, especially, to the careful perusal of our readers, as we are convinced that they can nowhere find a more complete and satisfactory consideration of the subject of which it treats. We are sorry indeed, that we are not able to follow the author through his admirable descriptions, as this branch of the subject is so interesting to us, that we conceive it could not be uninviting to any one; but we must be content with referring our readers to the work itself, and pass on to Part III.

Part III contains what is justly thought so indispensable to every student and practitioner, who wishes to practice obstetrics intelligently, namely, the mechanism of labor. This subject is here discussed with admirable clearness and simplicity, and commends itself to the careful study of every student of obstetrics. The consideration of the treatment of labor, and the attention to the woman and child necessary immediately after labor, is exceedingly useful, and the latter division especially should be carefully studied by the inexperienced practitioner, as it is on this rock that he often makes shipwreck of his reputation, by allowing the nurse to discover some embarrass-

ment in regard to the disposition of the mother and child immediately after delivery, or a hesitation in making all the necessary prognoses, etc., etc. Though these are really minor points in obstetric practice, yet it is often by attention to these details, that a young doctor begins to establish a reputation as a good practitioner; as the more essential and higher attainments are beyond the comprehension of those who are his judges.

The parts which we have hitherto touched upon have been interesting to us more especially as anatomists and physiologists; but in Parts IV and V we have the consideration of what is most important to us as practitioners of midwifery, namely, the surgery of Dystocia or difficult and unnatural labor.

These treat of every thing which renders labor difficult, and makes it necessary to employ artificial or unusual means in the delivery of the child or the after-birth. They also treat of "the diseases or accidents that may complicate labor, and require the intervention of art:" obstetrical operations, the production of abortion, embriotomy, etc. Of these sections we can only say, that the subjects are handled in the same clear and practical manner, which has characterized those portions of the work, which we have noticed more particularly.

Part VI has been added since the appearance of the first American translation, and treats of the hygiene of children. None of the diseases of children are taken up, but we have about fifty pages devoted exclusively to hygiene, a matter which is so generally neglected, and which is of such great importance. In regard to nursing, M. Cazeaux is decidedly of the opinion that every mother should suckle her own child; and he makes the remark, which strikes us as very just, that there is no necessity of being so strict towards the mother as regards vigor of constitution, quality of milk, and development of breasts, as it is proper to be, in choosing a nurse. "Were we in fact, to regard those women only as capable of nursing, who have the robustness and strength which we require in mercenary nurses, we should be obliged to relinquish the idea of seeing the majority of females in the upper-classes suckle their own children. We often find persons of this description who have but little milk, and that of a medium quality, who yet raise very fine children; and what is singular, if these same women should nurse another child, it is found to become emaciated from want of sufficient nourishment." How culpable then, and even criminal, is the unnatural practice of strong and robust women in the upper classes of society allowing a hireling to deprive them of what should be to them a sweet privilege; and how melancholy is it to see the health of a child sacrificed to the selfishness of a

mother who is unwilling to forego the pleasure of society, in order to give it its natural nourishment.

M. Cazeaux is by no means an advocate of the general use of anæsthetic agents in obstetric practice, but he does not go to the extreme lengths in which our countryman, Prof. Meigs, of Philadelphia, indulges. The author presents arguments both for and against their administration, and though he seems to disapprove of them himself, yet the arguments which he adduces, would rather incline to the other side. It is now well established that their administration usually does no harm, and that all we have to fear is the occurrence of an accident, the liabilities to which have been very much magnified. The practitioner should always bear in mind, however, that a great many things are attributed to chloroform or ether, by the friends of a patient, which we know perfectly well are of course in no manner dependent upon it. We have known of cases where death, which did not result until some days after the administration of an anæsthetic in labor, was attributed by the friends to chloroform, and it was said that the doctor killed his patient in this way. A knowledge of these facts should make us cautious, as it is incumbent on us not only to do all the good we can to our patients, but to preserve our own reputation.

In concluding our notice of this work, we do not hesitate to say that it is now the most complete and best treatise on the subject in the English language, and we cordially recommend it as such to our readers— F.

ART. VIII.—*The Medical Student's Vade Mecum. A Compendium of Anatomy, Physiology, Chemistry, Poisons, Materia Medica, Pharmacy, Surgery, Obstetrics, Practice of Medicine, Diseases of the Skin, etc., etc.* By GEORGE MENDENHALL, M. D., Professor of Obstetrics and Diseases of Women and Children in the Medical College of Ohio, Member of the American Medical Association, etc., etc. Fifth Edition Revised and Greatly Enlarged. With Two Hundred and Twenty-four Illustrations. Philadelphia: Lindsay & Blakiston. 1857.

The work which we have before us, from Messrs. Lindsay & Blakiston, has now reached its fifth edition, a fact which is generally thought to be a sufficient indication of a favorable reception by the profession. It is now probably sufficiently well known to all, and it would be useless to go into an analysis of its pages, or a discussion of its doctrines. The author from the start, disclaims all attempt at originality, and hopes merely to have given a compendium of the most rational views on the several branches taught in

our medical schools. The plan of the work is to present this information in the familiar form of questions and answers; and it is designed that this may serve to rescue the odds and ends of the student's time, from idle waste. We have simply glanced at the arrangement, and taken up, some of the subjects at random; and from our observation, can give testimony of the judicious manner in which the most important and salient points of the various branches have been selected. We do not suppose that this little volume is intended to be a companion to the practitioner, who of course, would not wish to read anything more brief, than the lectures from which he received his early instructions; but we conclude that whenever the venerable preceptor dismisses his student to the halls of medical learning, he gives him a quantity of good advice, and when he has concluded his admonitions on the snares and temptations of city life, the importance of preserving a *good moral character*, and devoting his mind exclusively to study, he mentions some books which it would be advisable for him to procure or carry with him. The Medical Student's Vade Mecum will be useful in many points of view, but we would add that it cannot supply the place of careful study of notes taken in the lecture room, the reading and investigating of cases, which nearly every student is able to see treated, and the reading of works which dilate on points which are merely touched upon by the professor.

The discussions which have lately arisen on a reform in the system of medical education, and in which the great majority have been in favor of lengthening, if practicable, the term of medical lectures, have been induced by the difficulty of crowding into one course, a sufficiently elaborate consideration of the subjects which must be taught from a single chair. This is especially true of the practical branches, medicine and surgery; and in some instances, many important diseases are passed entirely without mention, to make room for a full consideration of others. These deficiencies should be filled up by the study of tolerably elaborate treatises, so that the student may become acquainted with the opinions of other men than those from whom he is receiving instruction; and the extensive field which a medical student has entered upon, precludes the possibility of learning by a mere recital of facts, but rather by a system of convincing reasoning, and of arguments in support of received theories and doctrines. Though the volume which we have under consideration evinces great industry and sound judgment in its compilation, we are convinced that it frequently does harm in excluding the more complete and elaborate works, a reference to which is necessary, in order to reap all the benefits which may be derived from a

course of lectures; and we are confident, that in many instances information is forced into the brains of the student by these compendiums before examination, like the carbonic acid gas into a soda fountain, to come out with a great noise before the professor and leave the mind as innocent of medical knowledge as possible. That this has been used extensively by medical students, is shown by the fact, that in a comparatively short time, four editions have been exhausted. F.

ART. IX.— *Report of Mortality in Buffalo for the month of Dec., 1857.*

By C. L. DATTON, M. D., Health Physician.

DISEASES.	No.	Males.	Females.
Asthma et Diarrhoea,.....	1	1	
Accidents,.....	6	5	1
Atelectasis Pulmonum,.....	1	1	
Bronchitis,.....	4	3	1
Croup,.....	4	3	1
Carcinoma,.....	3	2	1
Cholera Infantum,.....	2		2
Diarrhoea,.....	2	1	1
Debilitas Senilis,.....	1		1
Epilepsy,.....	1		1
Eclampsia,.....	10	6	4
Enteritis,.....	1		1
Fracture,.....	1	1	
Febris Typhoid,.....	6	5	1
" Scarlatina,.....	2	1	1
" Puerperarum,.....	1		1
Hydrops,.....	3	1	2
Hernia,.....	3	3	
Hydrocephalus,.....	1	1	
Hyperæmia Pulmonalis,.....	2	2	
Hæmorrhage,.....	1		1
Intemperance et Delirium,.....	2	2	
Ignotus,.....	23	14	9
Marasmus,.....	5	5	
Morbus Cordis,.....	1	1	
Pertussis,.....	3	1	2
Pyelitis,.....	1	1	
Paralysis,.....	1	1	
Pneumonitis,.....	11	7	4
Parturition,.....	1		1
Peritonitis,.....	1		1
Rheumatism,.....	1	1	
Rubeola,.....	4	3	1
Syphilis,.....	1		1
Still-born,.....	7	6	1
Scrophula,.....	1	1	

REGISTER OF MORTALITY—CONTINUED.

DISEASES.	No.	Males.	Females.
Suicide,.....	1	1	
Tumor,.....	1	1	
Tuberculosis Pulmonalis,.....	16	10	6
Total,.....	137		

SEXES.

Males,.....	91
Females,.....	46
Sex not given,.....	0
Total,.....	137

AGES.

Still-born,.....	7	Between 20 years and 30 years,.....	15
1 day,.....	4	" 30 " " 40 ".....	14
1 day and 30 days,.....	10	" 40 " " 50 ".....	9
Between 1 month and 6 months,.....	21	" 50 " " 60 ".....	6
" 6 months and 12 ".....	10	" 60 " " 70 ".....	3
" 1 year " 3 years,.....	25	" 70 " " 80 ".....	3
" 3 " " 5 ".....	2	" 80 " " 90 ".....	0
" 5 " " 10 ".....	2	" 90 " " 100 ".....	0
" 10 " " 20 ".....	6	" 100 ".....	0
Total number under 10 years,.....	81	Total number over 10 years,.....	56
Ages not given,.....	0	Total,.....	137

NATIVITIES.

American, (white,).....	57	Prussian,.....	0
" (colored,).....	1	Swiss,.....	0
German,.....	30	French,.....	3
Irish,.....	19	Scotch,.....	0
English,.....	5	Poland,.....	0
Canadian,.....	1	Country not given,.....	21
Total,.....	137		

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Memoir on the Medico-Legal Examination of Spots of Blood, by means of the Microscope. By Dr. CHARLES ROBIN, Professor of the Faculty of Paris, etc., etc.

In all medico-legal researches, learned men have turned their attention almost exclusively to the chemical tests, and attached much importance to variations in the proportionate qualities of the different elements contained in the matters submitted to analysis.

This method could only give results so vague and uncertain, that no positive conclusions could be drawn from them. In order that medical science should not fail in its mission, when justice appeals to it for instruction and guidance, it is necessary that we should have recourse to other means than those furnished by chemical analysis, and mere external appearance of the spots.

With this hope we have made use of the microscope, and we can confidently expect from it the most useful results, as it has already cleared more than one point in legal medicine.

It may not be unnecessary to state for those who have not turned their attention to the recent applications of this instrument, that the microscope by its very physical construction shows, and can only show, what actually exists.

All organized tissues are composed of particles infinitely small, invisible to the naked eye, called anatomical elements, the well known characters of which enable us to distinguish them from each other at the different periods of intra and extra-uterine life. On the other hand, the various liquids of the animal economy contain certain elementary particles peculiar to them, and only visible by means of a high magnifying power, but they also carry along some particles of the mucous membrane over which they may happen to pass, such as the many kinds of epitheliums which are constantly renewed, and which differ from each other accordingly in different regions of the body, thus allowing their origin to be easily recognized.

The structure and disposition of the anatomical elements of the body, being once known, they become an excellent means of deciding as to the nature of

any of the tissues or liquids of the animal economy; and therefore it is, that an examination through the medium of the microscope, gives more positive results than other methods of investigation.

In fact, this instrument shows us the constituent and organized portions of those tissues, and not the reactions produced by their chemical decomposition, according to the method heretofore employed. The constituent particles of any body, whether of organic or vegetable origin, cannot be mistaken for the elementary forms of animal structure, whether we examine their form, their chemical properties, or their physical appearance; but their chemical analysis is far from offering the same absolute certainty.

The great advantage of microscopic examination, as will appear from the facts hereafter cited, is that however small be the quantity of matter submitted for legal investigation, it may nevertheless suffice for demonstrative evidence by means of the microscope. Thus, where chemistry would be at a loss for want of sufficient quantity to be operated on by its tests, there the microscopic examination would be perfectly satisfactory: such, for instance, as epidermic scales, or portions of fatty matter.

The application of this means of investigation has no other limits but those of nature herself, and every portion of the human body may thus be scientifically recognized: for blood, bile, meconium, fecal matter, vomiting, the brain, the skin, the muscles, fat, etc., have all their distinctive anatomical elements, which the microscope can recognize with unfailing certainty. Nor is it necessary to extend this enumeration of the possible applications of this instrument, for independently of the tissues of the body it may be most useful in determining the identity of any small portion of clothing, the nature of its texture, whether animal or vegetable, and numerous other problems, the solution of which is not only susceptible of the utmost accuracy, but will become comparatively easy for any one acquainted with the structural anatomy of plants and vegetables, by means of the microscope.

We hope that the application of this means to the particular case in hand, will illustrate still farther the nature and bearing of the preceding considerations.

The examination of the stains of blood is one of the most delicate questions in legal medicine. When chemical tests are used for this investigation, as has been the case heretofore, it is impossible to arrive at any certain or determinate result, but only a mere approximation, the most evident reason of which is, that chemistry examines the proximate elements of the blood, such as albumen and fibrine, and not the essential elements, such as the red and white globules. Microscopical investigation, combined with the different chemical agents, must offer, therefore, the highest degree of cumulative evidence, and the details of the following case will afford abundant proof of this assertion.

In the following pages we shall confine our attention to the description of the anatomical elements, which characterize the blood; but we must now observe that microscopical investigation of the different liquids, though sufficiently accurate, is not so absolutely certain as that of the tissues themselves, of the human body. Their anatomical elements, though invisible to the naked eye, can yet be easily recognized by means of the microscope; on the other hand, they are not so susceptible of characters at different ages of intra and extra-uterine life. Thus it is that small portions of the fetal membranes of the placenta, of the deciduous membrane, of the clots formed in the womb

can all be easily recognised; that the beard, the hair of man, and other animals, the fatty tissue, the nervous matter, etc., can be easily determined, and these are the very cases in which chemical tests are most unsatisfactory.

Here is the text of the instructions directed to Dr. Salmon, Surgeon of the Hotel Dieu, of Chartres, and myself, in the case of the murder of Louvet, by Gontier. [Extract from a Memoir published by Dr. Charles Robin, in the Annals of Hygiene and Legal Medicine, vol. xliv, p. 190.]

Whereas, This blouse, soiled as it is, was seized eight days after the crime, has not been washed since the murder, and has retained several spots of blood which the accused admits to be such.

Whereas, These spots of blood are found not only on the sleeves and front of this garment, but on the back, and that some of these spots, especially those on the sleeves and the shirt, appear to have been rubbed either with water or earthy matter.

Whereas, The accused has endeavored to explain these spots by saying that they were caused by blood which sprung from a duck killed in his presence.

Whereas, Although the circumstance which he invokes be not correct, and that the duck in question was not killed in his presence, it is important, nevertheless, to ascertain whether the spots of blood which are found on this blouse be really the blood of a duck, admitting the blood thus derived could have been projected in sufficient quantity to explain the numerous spots which exist on the sleeves, on the front, on the shoulder, and on the back, and whether in the second place, it is not more probable that this blood may be proved by its intrinsic characteristics to be that of an old woman who was violently struck on the head by means of a sharp, and heavy instrument.

Whereas, In such a case the microscope is not used by scientific men as a means of accurate investigation. We therefore submit the following questions to the two Doctors appointed as experts in the case:

1. Are the spots on the blouse, especially those of a dark color, with a brownish yellow appearance, really blood (and the experts shall not only say whether it contains the albuminous elements of the blood, but whether it be what really constitutes blood)?
2. Independently of the spots which appear like blood, even to the naked eye, are there not, on the blouse, other spots of the same nature, but not so dark, which must have been washed or rubbed with the intention of effacing them?
3. Are these spots of blood in such quantities and so differently situated that they cannot be explained by the splashing of a fowl killed in the presence of a man, wearing this blouse, and having his face turned towards the bird?
4. These elements of blood cognizable by the microscope, could they belong to a duck, which on being killed, may have thrown that blood in different directions?
5. On the other hand, are not these component particles of blood, such as belong to the human species? and if possible, designate the probable age of the person from whom they were derived.
6. If those spots be of human blood, may they not have been produced by the act of a person striking another with a hatchet or a spade?
7. The said experts will explain in their reply, their method of investiga-

tion, the guarantee, the security, and accuracy, offered by the processes they have adopted for the execution of their mandate.

SEC. II. *Examination of the Spots by the naked Eye, and a simple Magnifying Glass.*

In order to answer the above questions we have proceeded as follows:

After having counted and measured the spots of blood, we found that they varied in size from a quarter of a millimetre to three and a half millimetres; their nature, viz., blood, could be easily known by their color of a dark red, by day light, and of a brilliant black by lamp light, reflecting the latter with that peculiar vividness which is characteristic of spots of blood observed in those conditions. But this mode of reflecting the light from a candle or a lamp, is also a property of egg albumen of gelatine of gum, and probably of all liquids rich in albuminous principles. But the dark red color joined to this brilliant refraction of light is already sufficiently characteristic to guide us in the different methods of investigation.

All of these spots when examined by means of a simple magnifying glass, showed us a crust, slightly salient above the tissue of the cloth; each crust was brilliant under certain directions of light, but dark and opaque at other angles of inclination. These crusts were so very thin that it was impossible to appreciate them by the naked eye; they measured from one to two millimetres in length.

The smallness of the spots, the thinness of the crust by which they were formed, soon satisfied us of the utter impossibility of using the tests employed for an examination of the coloring matter of the blood, and its albumen, in order to decide as to their nature.

But the small black crust on the tissue of the blouse allowed us to decide positively as to the existence of the essential particles of the blood on each of the spots, respectively, notwithstanding their small extent. Those which reached the size of three millimetres and a half, were divided into two parts, by cutting the cloth in order that each portion might be submitted to a comparative examination by somewhat different methods.

§ III. *Examination by means of the Microscope of the Spots whose appearance to the naked Eye afforded sufficient presumption of their being Spots of Blood.*

With a certain number of the spots of which we have given the external characters, and having divided into two parts the largest of these, as above related, we proceeded in the following manner:

We cut into slips the cloth on which were seen two of the spots as above described, and immersed it during six or eight hours in pure water. To do this, the lower extremity alone of the strip containing the spot was plunged in water until it approached within two or three millimetres of the spot itself, which was out of water, but resting against the upper portion of the capsule holding the water. The fluid soon rises by capillary attraction up to the spot, and swells the material of which it is formed.*

* This process must be used whenever we have to examine similar spots, whether suspected of containing spermatic fluid, vaginal nasal or urethral mucus, meconium

As soon as the spots were sufficiently distended, we took them off by slightly scraping the cloth with a scalpel; we then placed these scrapings in a drop of the same water previously disposed on a piece of glass, as is generally used for examining objects under the microscope. By means of the ordinary needles used for microscopic preparations, we separated the substance of the crust, which was now of a higher red than in the dry state, and we covered the preparation thus disposed with a thin lamella glass, as usual in microscopic investigation. After having thus settled these preliminary arrangements we placed the preparation under the objective of a microscope magnifying 514 diameters, by means of which we recognize the following facts:

The liquid thus prepared, contained various fragments of the crusts found on the suspected spots, and distended by liquid. These fragments were irregular, some of a greyish appearance, and the others somewhat more colored than the preceding particles.

It was also evident that the liquid around these particles, had taken a reddish tinge, similar to that derived from a dissolution of the coloring matter of the blood. The portion of liquid thus colored formed a red zone of various dimensions around each of the fragments placed under the microscope.

Lastly, both in the liquid thus prepared, and in the very substance of the fragments derived from the spots, delicate microscopic filaments could be seen as if twisted upon themselves, and offering all appearance of cotton filaments; they were all of an indigo color, and contrasted with the pale red color of the liquid.

By adding water while under the microscope to these fragments or crusts of blood, and even before this addition, we could easily ascertain that the fragments now swollen by water were principally composed of fibrin, and secondarily of some of the white globules of blood.

The facts of which we shall next speak could be ascertained:

1. By making use of pure water to swell the spots which were found on the two last strips, out of the four we had taken from the blouse.

2. Or by scraping the small crust as seen under a simple magnifying glass, and receiving it either in the shape of dust or small fragments under the ordinary glass object carrier.

By proceeding in this manner, we found that water discolored the spots or the substance taken up by scraping; that the latter takes a greyish hue, and swells up a little; the water, on the other hand, becomes slightly red, takes up the coloring matter of the red globules of blood, dissolves the colorless elements, and leaves after this action no visible particles behind, such as nucleus or granulations.

When the fragments of the spots thus discolored are separated and broken up by the microscopic needles, and then examined under the microscope, it was found that they were principally formed of a transparent substance, slightly greyish, and finely granular. Moreover, the fragments of this substance, when placed under the microscope, revealed manifestly an arrangement of fibrils with their filaments, straight or slightly waving, intersecting

or fœcal matter, See Memoir, by Charles Robin and A. Tardieu, on the microscopic examination of spots formed by meconium or fœtal ceruminous substance, in *Annals of Hygiene and Legal Medicine* for 1857.

each other, sometimes detached and floating on the sides of the fragments examined.

Having treated these fibrils by acetic acid, they became extremely pale, swelled somewhat, lost their characteristic fibrillar appearance, together with the fine granulations which were scattered through them. Thus from the striated and minutely granular state, they took a homogeneous, transparent and gelatinous appearance.

These attributes are well known to be characteristic of the fibrin of blood, and this appearance is so constant that anatomists can always recognise that important element of blood.

Thus the texture of the smaller crusts or spots submitted to our investigation was entirely composed of fibrin, just as the clot of blood, drawn by venesection, represents one of these crusts on a large scale, being formed entirely of fibrin, holding in its meshes the two other solid elements of the blood, the red and white globules of blood.

§ V. *Characters of the white Corpuscles of Blood retained in the fibrin of the Crusts.*

In each fragment of these crusts thus placed under the microscope, the fibrin of which it was composed, after it had been deprived by water of the red globules retained during coagulation, contained several white globules of the blood.

In the substance of this fibrinous texture which we have just described, we found transparent globules of a greyish color, round and finely granular, being from eight to ten thousandths of a millimetre in diameter. In the centre of several of these could be seen one or two small nuclei, greyish, and irregularly spherical or oval, being from three to four thousandths of a millimetre in diameter. Now, such globules in the midst of a fibrinous substance could only be derived from the blood; and, by adding acetic acid to these corpuscles, we discovered all their characteristic reactions.

We saw the acid gradually rendering each corpuscle more and more transparent, and while swelling these a little, it also destroyed the fine granulations of these globules, and revealed more plainly their nuclei. These soon appeared, two or three in number, and sometimes four, situated towards the centre of the globule, being sometimes near each other in a triangular form, semi-circularly, or one above the other. The acid rendered the edges of these nuclei much darker, more easily seen, precisely as took place in fresh blood examined comparatively: the globules of the blood were also slightly more irregular than they would be from the simple effect of water.

The white globules of blood, whose fundamental characters we thus recognized, were sometimes isolated and disseminated in the fibrinous substance of the clots, sometimes they were contiguous, three or four, and even more being united together side by side.

§ VI. *Special examination of the red globules of the Blood contained in the fibrin of the spots, or adhering to the filaments of the cloth.*

Availing ourselves of the fact that a mixture or solution of different saline substances has the property of preserving the red globules of blood, and

restoring them to their original softness after having been dried, we accordingly used these liquids, the advantages of which we had already learned from experience. These liquids are prepared in Paris, by Mr. Burgogne, who is celebrated for his skill in preserving microscopical preparations; but, as a substitute for it, a concentrated solution of sulphate or phosphate of soda, with an addition of ten to fifteen per cent of glycerine, may be used in its stead.

The following is the process by which we succeeded in discovering the characteristic red globules of blood in the spots submitted to our examination. We operated successively on three spots, the diameter of which was from half a millimetre to a millimetre in width. The first set of preparations was made by scraping the slight crust of each spot in a drop of liquid. Covering the whole with a thin slip of glass, we allowed these small dark particles of crust to remain in the liquid during twelve hours. During this maceration, no other precaution is necessary than to protect the preparation from dust, for the liquid being slightly hygrometric, does not evaporate. At the end of this time we perceived that the small particles of crust which were plunged in the liquid had swelled and become more transparent, at the same time that they were of a brighter red than at the commencement of the operation. They had resumed, in fact, all the characteristic color, transparency, consistency and elasticity, which are peculiar to the small masses which are formed under the microscope by the accumulation of the red globules of blood.

By delicately moving the thin plates of glass over each other, an operation familiar to those accustomed to the use of the microscope, we succeeded in detaching from the mass a sufficiently large number of the globules of which it was composed. We were then enabled to observe the characteristics of these globules with as much precision as on fresh human blood.

Each globule had very nearly resumed its original form of a flattened, bi-concave disk. Some, however, still retained the polygonal form, which was due to the compression exercised during their agglomerated condition; others were concave on one side, as in the normal state, but they were convex on the opposite side, as usually happens when the globules of blood are placed in a solution of the sulphate of soda or potash. They measured from six to seven thousandths of a millimetre in width, sometimes a little over; which is the usual size of blood corpuscles. They had resumed their usual reddish yellow tinge, also characteristic of those elements of blood. And lastly, by adding to each preparation one or two drops of acetic acid, we saw these globules gradually becoming paler, until finally they were dissolved in the same manner as those of fresh blood under the same chemical action.

In the preceding examination we were enabled to hasten the swelling and separation of the red globules entering into the composition of the crusts, by adding a little water to the alkaline liquid which we had before employed. For the real object of this liquid is to preserve the elements of fresh blood, and its action on those which have become dry is accordingly slow and sometimes incomplete; but the addition of a small quantity of water, which can be introduced by capillary attraction between the two slips of glass containing the preparation, hastens the separation of the globules, without depriving them of any of their characteristic attributes.

The second series of preparations made from the three previous spots,
VOL. XL, NO. XL.—36.

was executed in the following manner: After having removed the crust from their surface by scraping, there still remained a small spot paler than the other, without any elevation above the tissue of the coat, but having the same form and size as the crust itself. Now, by cutting the surface of the spot thus stained, either with a pair of scissors or a sharp bistoury, and afterwards separating the filaments in a liquid similar to that used for the first preparations, we then allowed the separated filaments to macerate in this liquid. At the end of the same period of time we examined the cotton threads as they appeared in the liquid, and could recognize those characteristics of form and volume presented by the filaments of cotton above described; we also recognized the blue tint of indigo with which the cloth had been dyed, and we, moreover, ascertained that many of these filaments, for a part, or their whole length, were covered with a single coating of red blood globules, or by small red masses formed by the globules of the same kind accumulated and adherent to each other.

We succeeded even more easily with this preparation in separating the red globules of blood, and removing them from the surface of the cotton filaments, by the same process of sliding the glass plates over each other; and their characteristic flattened, bi concave shape, the peculiar color, and reactions with acetic acid were then clearly shown.

Moreover, on most of the filaments we could recognize the globules before they were detached; they appeared somewhat polygonal in shape, by mutual pressure, but they retained their usual size and color, as they formed a coating on the surface of the cotton filaments.

Sometimes the blood corpuscles could be seen on one of their surfaces, sometimes they presented themselves edgeways, at other times they adhered to the filaments by a portion of their surface, while the other projecting outwards, showed a round and flattened disc. Here, again, there could be no doubt: these were evidently red globules, an element which is only found in the blood of a mammiferous animal, being quite different from those of a duck or any other bird. This conclusion was again strengthened by adding an excess of water, or a small quantity of acetic acid to the preparation placed under the microscope, for this agent soon destroyed the red globules which were adherent to the cotton filaments. Those which had been detached, together with the irregular masses formed by these globules, found here and there between the filaments, were seen, as in the normal state, first to swell, and become somewhat paler, and then gradually to disappear as they were dissolved by the liquid.

§ VII. *Examination on the same spot of Blood:* 1. *Of the fibrin and white Globules.* 2. *Of the red Globules.*

We proceeded in the following manner with the other spots of blood, one of which was circular, of the size of one millimetre, the other oval, having the same width as the first one, and two millimetres in length.

The crust, of a brownish red, was used for a first series of preparations. For this purpose it was placed for some time in pure water, after having been obtained by scraping: it was then allowed to remain until almost all its color disappeared, and it was then separated with the needles in the manner before described (See Sec. III.) We then examined it with a micro-

scope magnifying 514 diameters, and recognized in those discolored fragments all the characters of fibrin on the one side, and on the other, those of the white globules of blood, such as we have described them above.

We proceeded with these fragments of a brownish red, as with those of the other spots, and found, as we expected, the same corpuscles retained between the meshes of the fibrinous net work. Some of these pieces were placed in the same preservative liquid we used before, and there they retained their red color, and became slightly swollen; but on adding an excess of water in one of the preparations, and a small quantity of acetic acid in the other, these liquids being introduced between the two plates of glass by capillary attraction in the manner above described, the fragments were seen to swell at first, and gradually become paler, until finally they were dissolved under our very eyes. Those which had been treated by water alone, left behind them a thin fibrinous net work surrounded with a circle containing a liquid of a pale yellowish red derived from the coloring matter of the blood dissolved in water.

The small red spot which remained beneath the crust after the latter had been taken from the surface of the cloth, and presenting, therefore, the same form, enabled us to prepare two other specimens; but as the object of these preparations was to examine particularly the red globules of the blood, and not to destroy them with a view of observing the fibrin and white globules, we proceeded otherwise than before. We therefore used the preservative liquid whose composition we have already given. With a sharp bistoury we scraped away the stained cloth, and then separated those particles in the alkaline liquid, and we examined the filaments under the microscope, after having suffered them to remain for some hours in this same liquid, either pure or diluted with about a tenth part of water. We then recognized the red globules adhering to the surface of the cotton filaments in the manner we have described above (See Sec. VI.)

By again gently moving the two surfaces of glass, one over the other, we could separate some of the red globules from the cotton filaments, and we could thereby ascertain these peculiarities of form, such as the round and biconcave disposition, together with the volume, the color and chemical reactions which we have before described.

It will thus be seen that, by means of the microscope, a single stain can be made to show the existence or absence of the three elements which are especially characteristic of blood. The superficial crust will show the characteristic forms of the fibrin and white globules of blood, while the threads of the cloth immediately beneath and into which the serum of blood carries the red globules, must be used to demonstrate the presence of the red corpuscles.

§ VIII. *Appearance of the corpuscles in the stains formed by the Blood of a Duck.*

In order to answer the question propounded to us in the above commission we caused blood to fall in drops on a blue cotton cloth from the carotid arteries of a duck, by cutting its neck. We left these spots during fifteen days in a dry place, at the ordinary temperature during the month of January, 1857, and we then proceeded to examine them by following exactly

the same method observed for the examination of the spots of blood found on the blouse of the accused. By putting the small crusts detached from the spots which were formed by the blood of the duck, in contact with the same alkaline conservative liquid before described, we obtained, at the end of a few hours, a certain number of flattened, oval globules, at least double the size of those of man, and having in the centre a small oblong or ovoid nucleus, quite as characteristic of the blood corpuscles of birds, as the lengthened oval shape of the corpuscles themselves.

It is important to observe that the central mark which is seen on the red globules of human blood, and which indicates a central depression existing on both sides of the disk, rendering them in a word bi-concave, is less marked on the globules which have been dried and then softened, than in the fresh state. So that these anatomical elements, after having been softened and separated in the blood stains, do not assume their former bi-concave form, at least not in so well marked a manner as at first. But this circumstance does not prevent them from being recognized by persons familiar with the appearance of the human blood in different conditions.

This small nucleus soon became apparent with clear and distinct outlines under the action of water, and an excess of acetic acid, for these agents constantly produce this effect, by dissolving the body of the globule which has a reddish appearance, but leaving entire the greyish nucleus.

The small crust detached from the stains of the duck's blood were afterwards put into water, and we observed them becoming gradually discolored with a greyish appearance, they likewise remained for some time surrounded by a circle of a pale red color, derived from the coloring matter of the blood corpuscles, dissolved from the small particles thus treated. When this discoloration had taken place we did not find the same fibrinous net work, which was manifest in the spots of blood supposed to proceed from the body of a woman. Nothing remained but a considerable number of oblong nuclei of a greyish color, and that which is peculiar to the blood globules of the duck. These nuclei were five or six thousandths of a millimetre in length, by about half of this size in width and thickness. These nuclei were exceedingly close to each other, being for the most part stuck together by a small quantity of colorless matter, in which the characteristic shreds of fibrin could scarcely be seen. Acetic acid immediately darkened these nuclei, their edges became better defined and somewhat black; at the same time they became more contracted and irregular, as is habitually the effect of this chemical agent on the fresh blood globules.

It was impossible to see the white globules among the mass of nuclei remaining after the action of water and acetic acid on the fragments of the crusts formed by the blood of the duck.

Thus, the oval form and the volume of these globules which was nearly double as compared to those found on the stains of the garment belonging to the accused; the absence of nuclei in the latter, which is always the case in man, while the presence of ovoid nuclei being constant in the blood of all birds; these characters preclude any possibility of the spots on the blouse being formed by the blood of a duck or any other fowl.

These characteristics enable us easily to recognize human blood in one case, from the blood of the bird, on the other hand, without any possible mistake, for the circular flattened form with no nuclei is as constant in the blood globules of man after the intra uterine period, as the oval flattened

form with an oblong nucleus in the blood globules of birds. Moreover, the difference caused by the almost complete absence of the fibrinous shreds in the blood of birds, whilst that of a man contains a large proportion of this substance; the small number or complete absence of white globules in the blood of the first, when compared to their abundant existence in the stains derived from human blood: they are distinctive marks which, though secondary to the first, have yet sufficient value to be attentively examined and noticed in the medico-legal researches.

It may not be unimportant to state that these investigations are among the most delicate which medical jurisprudence may require at the hands of the Physician; for these distinctions, though satisfactory and convincing to one accustomed to microscopical research, might not appear equally so to the uninitiated.

§ IX. *Examination of the other Spots on the Blouse, supposed to be of the same origin as the first, though less highly colored, and presumed to have been washed or effaced after their original production.*

We next proceeded to examine by means of the microscope, some of the dust, and small filaments from the cloth of the blouse, which dust was taken from the large stains on the sleeves, on the front and back parts of the blouse with a rusty or brownish appearance, similar to stains of blood after being wiped, or rubbed with earthy matter. We easily ascertained that the small particles of dust which we had detached, as well as those which were still adherent, were composed of small irregular grains of polyhedral shape, sharp angles, with many sides, but presenting no regular arrangement with each other. Some of these grains had no peculiar color, their centre being greyish or almost colorless, with a shining appearance, and thick, dark edges. Their diameter varied from 5 to 70 thousandths of a millimetre, or even more. Water had no action over them; acetic acid, when added to the former, hardly affected them, except by producing a slight effervescence. Hydrochloric acid alone, dissolved them quite rapidly, with considerable escape of gas. Others of these grains less numerous than the first, presented the same irregular shapes, but a more brilliant red color, resembling somewhat that which is characteristic of the several oxides and carbonates of iron. The diameter of these dark brown fragments varied from 4 to 35 thousandths of a millimetre: water had no action on them; acetic acid, when added to the preparation, had very little effect, so that in this respect neither of these fragments had properties at all resembling those derived from the spots of blood. The microscopical appearances, which we have just described, being those which are characteristic of the particles of earthy dust, and presenting none of those which are peculiar to the blood, we next examined their real nature and chemical composition by means of the appropriate tests known to science. To attain this object we proceeded as follows: We carefully detached, by means of a sharp bistoury, thirteen spots of a brownish color; some were irregular and large, others were small and round, having from 1 to 3 millimetres in width, and found on the surface of the large reddish spots paler than these particles, as seen on the lower part of the right sleeve. The left sleeve was not touched at all. The same process was repeated on four spots having from one to four milli-

metres in width, with a reddish brown appearance, taken from the back part of the blouse, and appearing like the first mentioned particles, to be super-imposed or situated over the lighter colored spots beneath them; the front of the blouse was left untouched. The substance thus taken off, when submitted to microscopical investigation, and to the tests already described, presented in due succession the characters of fibrin, with the white globules contained within its meshes, and also the red globules: so that these were exactly similar to the spots which we had already recognized as being formed by blood. The paler spots which remained after taking away the deeper red crusts just described, and presenting the same form and dimensions, did not, however, contain blood globules adhering to the cotton filaments, as we had seen on similar spots found in other parts of this garment.

In these we only found fragments or irregular grains of dust, of a greyish color in some places, in others of a dark red color, such as the rusty spots we have described, which were not formed by the particles of a dark brown color.

After this we carefully scraped, by means of a scalpel, the large rusty colored stains, which were situated on the right sleeve and on the back of the blouse, which stains were of a *lighter color* than the small ones above described.

The dust obtained by scraping these stains, was received in a large porcelain capsule, and then collected together by washing this vessel in warm distilled water. The turbid, muddy liquid thus obtained, was allowed to cool until next morning. By rest it separated into three parts:

1. The portion floating on the surface of the liquid consisted of bluish flakes. Under the microscope it was shown to be composed of cotton filaments, dyed blue, and accompanied with irregular particles, having the appearance of dust particles described at the beginning of this paragraph, and not acted upon by water. These particles were, moreover, in such small quantities, that it was useless, as we shall soon see, to enter into any special examination of their nature.

2. At the bottom of the tube we found a deposit of extremely fine granular powder eight millimetres in depth; the tube itself being about 15 millimetres in diameter. We next decanted the water which had deposited this powder, in order to examine the latter. By microscopical investigation we found that it was entirely composed of irregular corpuscles, some either colorless or of a greyish appearance, others having the dark red appearance of the oxide or carbonate of iron, such as we have above described; some, which had remained attached to a small cotton fibre, had drawn the latter with it to the bottom. We now lay aside this pulverulent deposit for a subsequent examination, the details of which will be given further on.

3. We next examined the liquid separated by decantation, and which was intermediate between the flakes floating on the surface and the deposit of powder we have just described. The liquid was nearly colorless, having only a greyish tint and slightly turbid. We ascertained, by means of the microscope, that this cloudy appearance was caused by a quantity of short cotton filaments, of a bluish color, which remained in suspension in this liquid. Heated to the boiling point, this liquid was not at all altered; it neither coagulated nor became transparent. We then filtered this liquid,

whereupon it became perfectly clear and transparent. Heated over again it remained unaltered. We now put aside this liquid to examine it more particularly, as will be described further on.

From this preliminary examination we had already derived several conclusions, the results of which we will give at once, as they guided us in the choice of the analytical methods which we shall next describe, but which only confirmed these, viz:

1. As the dust obtained from the large brownish spots did not alter in appearance after having remained in water, nor color the water itself to a red or a purplish red, we thus find a corroboration of the microscopical examination, which did not reveal any of the elements of blood in these particles of powder, for a much smaller quantity of powder obtained from scraping the spots of blood would have colored very perceptibly the same quantity of distilled water.

2. The absence of coagulation in the liquid submitted to a temperature of 100° , before and after filtration, shows that it did not contain, in solution, any particles of albuminous matter.

This purely chemical examination had thus shown us, just as the microscope did, that these particles of dust were of mineral origin, entirely foreign to the human body; and therefore the stains were not caused by stains of blood, partially washed or erased by friction.

§ X. Statement of the Chemical Analysis of the Dust derived from the brownish spots, which, from their color were supposed to be formed by Blood, that had been either washed or rubbed with some substance to make it disappear.

We first examined the action of distilled water on the dust derived from the stains. In order to do this we divided it into three parts, and put each of these parts into a separate tube. In the first, nitrate of silver gave rise to a decided white, fleecy precipitate, which was dissolved in aqua ammoniac, thus showing the presence of a small quantity of soluble chlorides.

The chloride of barium produced in the second tube an abundant white precipitate, which was not dissolved when the liquid was slightly acidulated with sulphuric acid. The test revealed the existence of a considerable proportion of soluble sulphates.

In the third portion of the liquid we produced a slight blue color by adding prussiate of potash to its contents, showing traces of the salts of peroxide of iron. The blue color became somewhat more intense by evaporation and reduction to one-half of the liquid tested.

We then put the pulverulent deposit, of which we have already spoken, into some water, acidulated by hydro-chloric acid; the whole mass was dissolved in the course of about an hour, producing at the same time a continued effervescence and escape of small bubbles of gas. The small quantity of material upon which we operated prevented us from collecting these, but every circumstance goes to prove that they were produced by the action of the hydro-chloric acid upon the carbonates, displacing carbonic acid gas.

The dissolution, when complete, presented a slight bluish tint; the liquid

thus obtained was still very acid, as was shown by test paper, which was immediately reddened. We divided it into three equal parts, in as many different tubes. In the first, a small quantity of chloride of barium gave no precipitate; but when the liquor was rendered neutral by the addition of aqua ammoniæ, it immediately gave rise to an abundant white precipitate of phosphate of baryta. A white precipitate was also produced by adding an excess of acetate of lead to another portion of this liquid. These tests revealed to us the presence of a certain proportion of phosphoric acid, in combination with lime for the most part, forming those irregular grains of mineral dust seen under the microscope, and deposited in distilled water. This will be still better established by the following tests: To the second portion of the liquid we added an excess of oxalate of potash, which immediately produced an abundant granular precipitate, collecting rapidly at the bottom of the tube, and formed of oxalate of lime.

Finally, to the last portion of liquid we added some yellow prussiate of potash, which gave rise to the well-known prussian blue. These different tests thus proved, like the microscopical examination:

1. That the powder derived from these brownish spots—which were somewhat of a lighter color than those in which were seen blood-globules and fibrin—contained none of the elements of blood, nor any other animal matter.

2. That this dust was composed of a small quantity of cotton filaments, but principally of mineral substances, such as those which are found in most of the ordinary earth dusts.

3. That most of the latter substances were in the shape of irregular grains, some greyish, or colorless, formed principally of phosphate and carbonate of lime, with traces of soluble sulphates and chlorides, and perhaps some sulphate of lime.

4. That the other irregular grains, less abundant than the first, and which gave the rusty appearance to the dust, were doubtless composed of the oxyde and carbonate of iron; and the different tests revealed their presence in much greater quantities than those appertaining to animal substances.

5. That the lighter spots, which appear to have been rubbed or spread out by washing, were not produced by blood, but by dust or mud, which had soiled the garment of the accused before the perpetration of the crime. This latter conclusion is corroborated by the fact that on some of these mud stains we found some spots of blood, having the same characteristic appearance as those which were discovered in other parts of this blouse.

§ XI. *Answers to the Interrogatories propounded by the Presiding Judge.*

Having ascertained that the large rusty spots, of a paler color than the others, are not formed by blood, but by earthy matters mixed with oxyde and carbonate of iron in the shape of dust, we can answer:

Yes! the blood from the open carotid artery of a duck may be thrown in sufficient quantity to produce the numerous small bloody stains on the

sleeves, the front, and even the back. But, *a fortiori*, these very stains, of whatever shape, could have been derived from arteries situated in different soft parts on the head of an old woman; which arteries may be wounded and cut by violent blows on the head with a sharp or heavy weapon; this conclusion is more probable since an examination of said spots showed evidently that they contained the elements of human blood, and not those of a duck; the experts appointed in this case may now answer the above interrogatories as follows:

1. The dark-red brown stains found on the blouse are formed by blood, which has lost, by evaporation, the water rendering it fluid. In blood alone do we find combined the red globules, the fibrine and white corpuscles, such as we have distinctly recognized in this case.

The microscope alone could have enabled us to decide this question, because those spots were too small to show by chemical tests the albuminous elements of blood. It is, moreover, well known that albumen and its analagous compounds may be found not only in the blood stains, but in many animal liquids, and even in certain vegetable products, whether colored or not. On the contrary, blood alone combines together fibrine, the flattened, circular, red globules, having no nuclei, and the spherical white globules having from one to three nuclei, as revealed by water or acetic acid.

2. Independently of those spots, which, to the naked eye, resemble stains of blood, there were no others of like nature; those which are paler and appear to have been washed or rubbed, are not produced by blood. Their examination showed that they contained none of the elements of blood. For the microscopical examination, completed by the analysis of the substance derived from scraping these spots, showed that they contained grains of mineral and earthy matters, some of a calcareous nature, as the phosphates, carbonates and sulphates; others of a reddish brown color, being composed of the oxydes and carbonate of iron; these substances being generally met with in the mud and dust which produce stains on the clothes of workmen. But on some of these earthy stains certain spots of blood were seen, which had all the characteristic appearances presented on other parts of the blouse not similarly stained.

3. The spots, which are really blood—that is to say, having all its elements, less the water, which has evaporated—do not exist in sufficient quantity for us to say that they could not have been produced by a jet from the arteries of a duck, for these could throw blood far enough to bespatter a person situated near one killing a duck.

4. But the elements of blood forming those stains are not such as are characteristic of the blood of a duck. The blood corpuscles of birds have a flattened, oval shape, a large volume, and a central nucleus.

5. On the other hand, the elements of blood found on these stains unquestionably belong to the human species, for there we find the fibrinous network, and the usual reactions with acetic acid; we find, also, the white corpuscles of human blood having the size, volume, granular appearance, nuclei and chemical reactions which are peculiar to those anatomical elements. The red corpuscles are also distinctly seen, having the size, circular, flattened, bi-concave form, and the reddish hue peculiar to the blood corpuscles of man when seen by transmitted light; they have also the same chemical properties, viz: solubility in water and acetic acid, without leaving any nucleus behind.

But in the present state of the science we can go no farther; we cannot determine from the appearance of the blood, the sex or age of the individual to which it belonged.

6. We can have no hesitation in asserting that these stains could have been derived from a jet of venous or arterial blood caused by wounds on different parts of the head of a person; said wounds being caused by several successive blows from any sharp or heavy instrument.

7. The undersigned experts have shown, by the details with which they have described the different steps of their investigation, that the process to which they had recourse offers greater certainty, exactness and precision, than any other method heretofore employed. For, the microscope alone, can reveal to us, not the albuminous or ferruginous elements of blood, but its peculiar constituent particles, those by which it is really characterized, in contra-distinction to other liquids of the animal economy, for the fibrin, the red and white globules, are found in blood alone. The certainty and precision of microscopical investigation is proved by the fact, that this instrument alone could have shown whether these spots were formed by human blood, or those of another animal; as it is by means of the microscope that we have established the differences in size, volume and appearance, between human blood globules and those of birds, reptiles and fishes.

Beside the power given to us by this instrument, of examining the smallest possible particles supposed to contain blood, it has also the superior advantage of precision and certainty, for chemical analysis, though operating on large quantities of blood, could only reveal the presence of the albuminous or ferruginous principles of blood; now these elements are common to all the animals above mentioned, as well as to man himself, so that (except by the use of high magnifying powers,) it is utterly impossible to discriminate between the blood of a bird and that of a man. Chemical tests are, therefore, of secondary importance, compared to the microscope, in all examinations similar to those above described.—*New Orleans Medical News and Hos. Gazette.*

School of Medicine at Algiers.—The London Lancet contains an account of a decree dated Aug. 4th, of the present year, for a School of Medicine and Pharmacy, at Algiers. As far as examinations are concerned, the school will be in connection with the Faculty at Montpellier. The diplomas granted in Africa will entitle to practice in the French possessions in any part of the world. It was in Africa, at the Alexandrian school, that public prejudice first gave way and permitted the examination of dead bodies, the greatest boon to the medical profession, inasmuch as it removed the most serious obstacle to its advancement—ignorance of anatomy. Herophilus and Erasistratus were the heads of the Egyptian school, and were the first who were permitted to practice human dissections. These pioneers not only corrected numerous errors, but made many important discoveries. Many of the names given to parts by Herophilus and Erasistratus, still remain in use. Having acquainted themselves with structure, they became bold in their surgical operations. The latter made incisions down to the liver and spleen, and applied medicines directly to these organs.—*Ohio Med. and Surg. Journal.*

EDITORIAL DEPARTMENT.

Annual Dinner of the Erie Co. Medical Society.—The society met as usual on the second Tuesday in January, with quite a full attendance from the city and county; and after a session of more than ordinary interest, heightened in a great measure by the admirable address of its late president, Prof. Hamilton, and the oration of Dr. Newman, adjourned to meet again in the hospitable halls of the American Hotel of this city. At about four o'clock, between thirty and forty guests sat down to an excellent dinner, prepared by mine host of the American. Many of our readers were present, and those who were not, are sufficiently familiar with the effects of a good dinner and the physiology of the circulation of the bottle, to enable them to believe that every body was good natured, in good spirits, and making himself agreeable to himself and his neighbor.

The utmost geniality and good feeling prevailed, and a number of excellent and appropriate speeches were made in response to various sentiments, particularly the first speech by the president, and a characteristic and admirable response by the senior editor of the Journal, to a sentiment which those present will recollect, as well as speeches from the chairman of the dinner committee, the county members and others. All this contributed to enable the guests to pass four hours as pleasantly, and we think as profitably as possible.

Our profession has always been compelled to submit to jokes and insinuations concerning the differences which they say, must arise between doctors, but any one who could have looked in upon our society dinner, would have been compelled to acknowledge that there was one thing in which doctors did not disagree, but in which they were invariably unanimous, namely, the appreciation of a good dinner. Nothing brings men more closely together and goes farther to establish pleasant social relations, than a meeting of this kind, and

if there be any truth in the imputation which is so frequently cast upon us, we can conceive of nothing which is better calculated to drown professional jealousy; and on the other hand, if there be no truth in it, a sufficient argument in favor of an annual society dinner, is the good time which we are all sure to have on the occasion. Older members of the society will recollect, (what we only know by tradition), the difficulty which was experienced in the establishment of a society dinner as a permanent institution; but now that it is established, we are confident that no one is blind to its advantages. May none of the number which met in 1858 be missing in 1859. r.

Reproduction of Bones and Joints after their removal in cases of Whitlow.—We notice in the January number of the Peninsular Journal, a number of cases quoted from the California Medical Journal and Review, in which entire phalanges, which have been removed for disease or injury, have been reproduced, even to their articular surfaces, forming a joint as perfect as before. The author, Dr. H. H. Toland, of San Francisco, does not appear to be aware of communications which have appeared on this subject in this Journal, by Prof. Hamilton, and in the American Journal, by Prof. Dudley, of Lexington, Ky., but lays claim to the discovery of this reproduction of joints; we quote the following from Dr. Toland's article:

As the bone is formed by the periosteum, if the latter be not removed, and the soft parts are kept extended, the bones as well as the joints are reproduced, and the part restored to its former usefulness. It has long been known that bone will be reproduced provided the periosteum remains, and we only claim to have made the discovery that the joints are also, by proper management, restored, even under the most unfavorable circumstances. Whether they are as perfect as the original, possessing cartilages, ligaments, and synovial fluid, we are unable to say; but we know that they possess motion, and sufficient strength to perform the function of the most perfect joints.

Dr. Dudley mentioned his practice in such cases, in the Transylvania Medical Journal, for Dec., 1849, but published no illustrative cases. Prof. Hamilton, however, in May, 1850, published a case analagous to those reported by Dr. Toland, in this Journal, which we extract:

Catherine Dolan, aged 24, was admitted into the hospital, Dec. 25, 1849. Thumb. The bone was necrosed, and on the 29th, I extracted the phalanx entire. The inflammation having considerably subsided by the third of Jan-

uary, five days after the operation, I applied a tape roller the whole length of the thumb, and moderately tight. This was continued with occasional intermissions, for two months, when a new phalanx was found to have been formed, of the same length, breadth and form as the original phalanx; the articulating surface was also reformed, and the flexor and extensor tendons so attached as that the motions of the joint were perfect.

This result is not now for the first time discovered. More than a year since, Prof. Dudley, of Lexington, informed me in a private communication, that he had been able to reconstruct a phalanx, when the bone had been entirely removed, by the continued application of a roller. To Dr. Dudley, therefore, is the profession indebted for this interesting pathological discovery.

Thus our readers will see that though an important and interesting observation, we are compelled to give the credit of the discovery to Dr. Dudley, and we believe that Dr. Hamilton was the first to publicly confirm his statement, and the very first who published a case. We are somewhat surprised that Dr. Toland did not know of this discovery by Dr. Dudley, as in addition to the articles in the *Transylvania* and the *Buffalo Journals*, an article appeared at a later date, in the *American Journal of Medical Sciences*, of the existence of which Dr. Toland and the editors of the *Peninsular Journal* seem to be equally unaware. The treatment employed by Dr. Toland is essentially the same as that recommended by Prof. Dudley, and followed with such good success by Prof. Hamilton, the only difference being that the former uses pasteboard splints, while the latter uses a narrow roller, the object of each method being merely to support the soft parts. F.

Sorghum Saccharatum.—We are indebted to the politeness of Dr. Isaac Hays, for a detailed account of the experiments of Joseph S. Lovering on the Chinese sorghum, which have been followed by such successful results. We have not ourselves supposed that the sorghum would never be made into sugar; but in an article in the January number, merely quoted the statement of a chemist connected with one of the Southern sugar manufactories, that it could never be made to granulate. We extract a synopsis of the conclusions arrived at by Mr. Lovering, from his pamphlet containing an account of his experiments. F.

1st. That it is obvious that there is a culminating point in the development of the sugar in the cane, which is the best time for sugar making. This point or season I consider to be, when most if not all the seeds are ripe, and after several frosts, say when the temperature falls to 25° or 30° F.

2d. That frost, or even hard freezing, does not injure the juice nor the sugar, but that warm Indian summer weather, after the frost and hard freezing, does injure them very materially, and reduces both quantity and quality.

3d. That if the cane is cut and housed, or shocked in the field when in its most favorable condition, it will probably keep unchanged for a long time.

4th. That when the juice is obtained the process should proceed continually and without delay.

5th. That the clarification should be as perfect as possible by the time the density reaches 15° Beaumé, the syrup having the appearance of good brandy.

6th. That although eggs were used in these small experiments, on account of their convenience, bullock's blood, if to be had, is equally good, and the milk of lime alone will answer the purpose; in the latter case, however, more constant and prolonged skimming will be required to produce a perfect clarification, which is highly important.

7th. That the concentration, or boiling down, after clarification, should be as rapid as possible without scorching—shallow evaporators being the best.

With these conditions secured, it is about as easy to make good sugar from the Chinese cane as to make a pot of good mush, and much easier than to make a kettle of good apple-butter.

Dr. Austin Flint.—We have the honor and the above mentioned gentleman labors under the disadvantage of bearing this name, and inasmuch as we occasionally appear before the medical public, articles which emanate from our individual pen are sometimes attributed to the senior. We notice this mistake in a kind notice in the American Journal of Dental Science, of a paper on the capillary circulation, which appeared in the July, 1857, No. of the American Journal of Med. Sciences, of which Dr. F. sen., would, perhaps, be glad to say that he is entirely innocent. As this paper was here kindly mentioned, we feel it our duty to exonerate Prof. Flint from its authorship, though under other circumstances we would not, perhaps, be unwilling that he should father some of our iniquities. In future, if any of our editorial confrères are pleased with an effort of ours, they will be kind enough to remember the *Jr.*, if otherwise, it is not so material. v.

We have on hand such an amount of original matter, that we were compelled to leave out a review of *West on Diseases of Women*, from the pen

of one of our most able collaborators. We were anxious to present to our readers in the present number, the article on microscopic examination of blood stains, by Robin, which we think is a paper of great practical utility. Several books stand over to be noticed in our next number. r.

A Practical Treatise on the Diseases of Children. By J. FORSYTH MEigs M. D., Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, and of the Academy of Natural Sciences of Philadelphia. Third Edition, carefully Revised. Philadelphia: Lindsay & Blakiston. 1858.

This admirable text-book on the diseases of children, has now become a standard work. The labors of the author have added much entirely new matter to the first edition, which formed one of a series entitled "The Medical Practitioner's and Student's Library." The third edition has been carefully revised, and much new matter incorporated into the text, though the author has been prevented from making additions of chapters on subjects not touched upon, which he had proposed to do in the present edition. We hope that this promise will be fulfilled, however, in another edition. r.

American Medical Monthly.—The proprietors of this Journal have enlarged the volume by an addition of sixteen pages to each number. We are glad to see this evidence of prosperity, and can bear testimony that it is well deserved. The Monthly has always been conducted with high-minded spirit and candor on the part of the editors, and its pages have been enriched by many valuable contributions to science. r.

Editorial Change.—With the last number of the twelfth volume of the Charleston Medical Journal, Dr. C. Happolt retires from its editorial management and proprietorship. Dr. Happolt retires with our sincere wishes for his future welfare and our respect for the able manner in which he has conducted his journal. The new editor, Dr. J. Dickson Bruns, is already favorably known to the profession by some important and interesting contributions, and will no doubt sustain himself well in his new position. r.

The North American Medico-Chirurgical Review.—The size of this sterling periodical has been enlarged with the commencement of the second volume, making now one hundred and ninety-two pages to each number. this journal was commenced in Philadelphia on the first of January, 1857, by Profs. Gross and Richardson, the former editors of the Louisville Review; the sound and able articles and reviews which have appeared in its pages for the past year have made it one of the most agreeable and profitable of our exchanges, and have rendered its success sufficiently flattering to induce the publishers to enlarge it to its present dimensions. The appearance which it now presents in point of typography and style is highly creditable, and the editorial management is such as to make it rank with the best Journals of any country.

F.

Consolidation.—The Western Lancet and the Cincinnati Medical Observer, have been consolidated under the name of the Cincinnati Lancet & Observer. Some of the circumstances which induced this change are mentioned in the last number of the Lancet. The want of a sufficiently energetic corps of colaborers, and the desire to diminish the number of rival factions and interests, and unite the talent of her writers, are mentioned as the principal causes which have made this step advisable. The consolidated number looks well.

F.

A New Medical School at Nashville.—We learn that the brilliant success of the medical department of the University has prompted a new enterprise in the way of a Medical School at Nashville. We understand that it is to be under the patronage of the Methodist denomination.—*Cincinnati Lancet & Observer.*

New Sydenham Society.—An effort has been made to organize another Sydenham Society, for the purpose of republishing modern works and papers, and more especially those of a practical class. A second meeting will soon be held, and the matter definitely settled.—*Western Lancet.*

The University of London and Homœopathy.—At a late examination for the degree of M. B. of the University of London, a candidate, who was known to profess and practice homœopathy, was rejected.—*Id.*

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

MARCH, 1858.

NO. 10.

ORIGINAL COMMUNICATIONS.

ART. I.—*Fractures of the Ribs, and of their Cartilages.* By **FRANK H. HAMILTON, M. D.**

§ I. *Fractures of the Ribs.*

Fractures of the ribs, observed more often than fractures of the sternum, are rare as compared with fractures of other long bones.

In my records only twelve patients are reported as having had broken ribs; but as in several of the cases two or more ribs were broken at the same time, the total number of fractures is about thirty. If, however, I had always accepted of the diagnosis made by other surgeons the number would have been much greater, since I have been repeatedly assured that the ribs were broken where, upon the most rigid examination, no evidence, beyond the existence of a severe pain and of difficult respiration, has been presented to me.

Etiology. The force requisite to break the ribs is scarcely less than what is requisite to break the sternum; and in childhood and infancy it is sometimes almost impossible to break them, so that children and even adults are

often crushed and killed outright, where, although the pressure has been directly upon the thorax, the ribs have resumed their positions, and have been found not to be broken. I have met with several examples of this kind.

In old age, the cartilages ossify and the ribs themselves suffer a gradual atrophy, which renders them much more liable to break.

The most common causes are direct blows, of very great force, in consequence of which sometimes the fragments are not only broken but more or less forced inwards; occasionally they are the result of counter-strokes, and then the fragments, if they deviate at all from their natural position, are salient outwards: a species of fracture which I have not met with so often.

Malgaigne has collected eight examples of fractures of the ribs produced by muscular action, by the beating of the heart, &c., all of which occurred upon the left side. It is believed, however, that in all of these cases the ribs had previously become atrophied, and perhaps undergone other changes in their structure, rendering them liable to fracture from the action of trivial causes.

Pathology, Seat, &c. The fourth, fifth, sixth and seventh ribs are most liable to be broken; the upper ribs, and especially the first rib, being so well protected in various ways as to greatly diminish their liability, while the loose and floating condition of the last two ribs gives them an almost complete exemption.

In my own cases I have found the first, second, third and fourth ribs, each broken once; the fifth, six times; the sixth, seven times; the seventh, six times; the eighth and ninth, once; and the tenth, twice.

Fourteen were broken through their anterior thirds, generally at or near the junction of the cartilages with the ribs; five through their middle thirds; and nine through their posterior thirds. Malgaigne has noticed, also, contrary to the general opinion of surgeons, that the ribs are most often broken in their anterior thirds, whether the cause has been a direct or a counter blow.

The direction of the fracture is generally transverse or slightly oblique: sometimes it is quite oblique. It is often compound; and in a few instances I have found it comminuted or multiple. Where the fracture is compound it is rendered so generally by the fragments having penetrated the lungs and not by a tegumentary wound. In only six of the twelve cases seen by me, has the fracture been uncomplicated with fractures or dislocations of other bones.

Displacement cannot occur in the direction of the axis of the bone unless several ribs be broken at the same time. The fragments are, therefore, either not at all displaced, or they fall inwards towards the cavity of the chest, or outwards, or very slightly downwards, in the direction of the intercostal spaces. Sometimes the rib moves a little upon its own axis.

Prognosis. Death occurs sooner or later in a pretty large proportion of the cases in which the ribs have been broken; yet not often as a direct consequence of the fracture, but only as a result of the injury inflicted upon the viscera of the chest, or of other injuries received at the same moment. The violent compression of the heart and lungs have frequently produced death, and sometimes, as I have more than once seen, almost immediately; or the patients have succumbed at a later period to acute pneumonitis.

Lonsdale saw a case in which the body of a man having been traversed by the wheel of a wagon, eight ribs were broken, and death having followed most immediately, the autopsy disclosed a rent in the left auricle of the heart, produced by one of the broken ribs. *Lonsdale*, p. 258.

South says there is such a specimen in St. Thomas Hospital. *Chelius*, v. i. p. 599.

Dupuytren reports a similar case. The same surgeon has also seen several deaths produced by the emphysema, independent of the fracture, two of which are particularly described in his *Clinical Lectures*, (pp. 79-80.)

Amesbury has seen a case of death from rupture of the intercostal artery, where there was no injury of the lungs. *Amesbury on Frac.*, v. ii, p. 612.

In several instances observed by me, patients have suffered from pains in the side, occasionally from cough, &c., after the lapse of two or more years, and I suspect it is no uncommon thing for these injuries to entail some such permanent disability, but which is a consequence rather of the injury to the viscera of the chest than of any condition of the broken ribs themselves.

In general, simple fractures of the ribs unite in from twenty-five to thirty days. Malgaigne has seen one case of non-union; Huquier met with another upon the cadaver, in which a complete false joint existed, furnished with a capsule and lined with synovial membrane, (*Malgaigne*, p. 435.) Eve, of Nashville, Tenn., saw a case of non-union occasioned probably by a caries or necrosis of the bone, since it was accompanied with a discharge of matter, and in which a removal of the ends of the fragments resulted promptly in a cure of the sinus, (*New York Jour. of Med.*, v. xvi, p. 136,) and Samuel Cooper says there is a specimen in the museum of the University College, of

a fracture of six ribs, where the fragments are only connected by a fibrous or ligamentous tissue. (*S. Coop. Surgery*, v. ii, p. 321.)

The union generally occurs with only a slight degree of displacement.

After the union is completed, even where there is no displacement, a certain amount of ensheathing callus may generally be felt at the point of fracture. Of five cases which I have carefully examined after recovery, in only one instance was I unable to detect any irregularity at this point. I have in my cabinet nine specimens of fractured ribs, in four of which the ensheathing callus is completely formed, but the fragments are in perfect apposition: in one apposition is preserved, but there is no ensheathing callus; and the remaining four, all occurring in the same person, are united with displacement, but without a proper ensheathing callus.

In some specimens I have observed sharp spiculæ of bone or osteophytes extending along the course of the intercostal muscles from one rib to the other, forming a species of ankylosis between their adjacent margins.

Symptomatology. Acute pain, referred especially to the point of fracture, and producing great embarrassment in the respiration, with crepitus, are the most common indications of a fracture. The pain and embarrassed respiration are, however, far from being diagnostic, since they are often present in an equal degree when the walls of the chest have only been severely contused.

The crepitus, also, is often difficult to detect, owing to the thickness of the muscular coverings, or to the amount of fat upon the body, or to the fracture having occurred perhaps directly underneath the mammæ in the female. In three instances, where the presence of emphysema rendered the existence of a fracture quite certain, I have been unable immediately after the accident to discover crepitus.

The crepitus may be discovered sometimes by pressing gently upon the seat of fracture, or by applying the ear or the stethoscope over this point while the patient attempts a full inspiration, or coughs; or we may press upon the front of the chest with one hand, while the fingers of the other hand rest upon the fracture.

Occasionally the patient has felt the bone break, and very often he feels or hears the crepitus after it is broken and will himself indicate very clearly the point of fracture.

At the same time that we detect crepitus we are able also to discover motion in the fragments, but I have once or twice discovered preternatural mobility without crepitus.

Emphysema, which is almost certainly indicative of a fracture, is present in a pretty large proportion of cases. It has been observed by me in seven out of twelve cases: generally it did not extend over more than two or three square feet of surface; but in one instance it finally extended over nearly the whole body. It is remarkable, however, that in only two of these seven cases did the patients expectorate blood, and then in a very small quantity, and not until the second or third day.

Desault observes that emphysema rarely succeeds to fractures of the ribs; an observation which, as will be seen, my experience does not at all confirm.

Treatment. In simple fractures, where there is no displacement, or where the displacement is only moderate, the chest may be enclosed with a broad belt or band, as we have already directed in case of fracture of the sternum: provided always that it is not found to increase instead of diminishing the patient's sufferings. Some patients cannot tolerate this confinement at all, while with a majority, although it is at first uncomfortable and oppressive, after an hour or two it affords them great relief from the distressing pain, and they will not consent to have it removed even for a moment. In nearly all cases of comminuted, or multiple fracture, it is inadmissible, on account of its tendency to force the pieces inwards.

Hannay, of England, has suggested the use of adhesive straps as a substitute for the cotton or flannel band; the several successive pieces being imbricated upon each other until the whole chest is covered.* The same objection holds to this mode of dressing as to a similar mode of dressing a broken clavicle, which has been recently recommended. It will certainly become loosened after a few hours, by the slight but uninterrupted play of the ribs.

The forearm ought also to be brought across the chest at a right angle with the arm, and secured in this position with a moderately tight bandage or a sling, so as to prevent any motion in the pectoral muscles.

As to position, the patient generally prefers to sit up, or he chooses a position only partly reclining upon his back; but there is no positive rule to be observed in this matter, except that such a position shall be chosen as shall prove most comfortable to the patient.

If the fragments are salient outwards, the fracture having been produced by a counter stroke, they may be reduced by pressing gently upon them from without. If, on the contrary, the fragments are salient inwards, they will be found, in a great majority of cases, to have resumed their positions

spontaneously or through the natural actions of respiration; but if they have not, it will be exceedingly difficult to restore them. Possibly it, may be accomplished by pressing forcibly upon the front of the chest, or upon the anterior extremity of the broken rib; yet if the fragments are comminuted, and the ends are much driven in, this method will avail little or nothing. In such cases several surgeons have recommended that we should cut down to the bone and elevate the fragments, but Rossi alone claims to have actually put the suggestion into practice.

No doubt, if the necessity was urgent, this method might be successfully adopted; or, instead of cutting down to the broken rib, we might even seize the fragment with a hook, as suggested by Malgaigne, or, what in some cases might be even more convenient, with a pair of forceps constructed with long teeth, obliquely set upon a firm shaft. Yet the exigency which will demand a resort to any of these measures will be exceedingly rare.

In no case do I attach any value or importance to the advice given by Petit, that we shall place a compress upon the front of the chest, underneath the bandage, in order to reduce the fragments, or to retain them in place after reduction. Lisfranc, who advocated this method, claimed that its advantage consisted in the increased length which was thus given to the antero-posterior diameter of the chest, and the consequent accumulation of pressure from the encircling band, in this direction.* The mechanical law is no doubt correctly stated, but its value in practice is too inconsiderable to deserve much consideration.

The emphysema generally demands no especial attention, since it is usually too limited to occasion inconvenience, and when more extensive it generally disappears spontaneously after a few days, or a few weeks at most. The advice given by some surgeons, that we ought in these cases to cut down to the pleural cavity so as to allow the air to escape freely through the incision, seems thus far to have rested its reputation upon a more than doubtful theory rather than upon any testimony of experience. Abernethy alone, so far as I know, has actually made the experiment, and his patient died.

Dupuytren, in the two cases already alluded to, bled the patients and applied resolvent liquids, with rollers; he also made incisions with the lancet at various points of the body, more or less remote from the seat of fracture, a practice, however, in which he confesses he has no confidence whatever. These patients both died.

* Rankin's Abstract, vol. ii, p. 204, from *Gaz. des Hôpitaux*, July 8, 1845.

Dr. Stedman, of the Massachusetts General Hospital, has reported the case of a man aged 69, of intemperate habits, who, in addition to a fracture of one of his ribs, had also a dislocation of the outer end of the clavicle. The emphysema commenced immediately and reached its acme on the twenty-second day. At this time it had extended over his whole body; his eyes were closed and he breathed with great difficulty: but on the forty-fifth day, the emphysema had entirely disappeared, and he was dismissed cured. The treatment consisted chiefly in the free internal use of stimulants and in the application of bandages; but the bandages soon became disarranged, and after a few days they were entirely laid aside.*

In the case of my own patient, where the emphysema was almost equally extensive, the patient recovered after a few weeks, under the use of a simple diet, and without any special medication whatever.

§ II. *Fractures of the Cartilages of the Ribs.*

Boyer was incorrect when he said that the cartilages of the ribs could not be broken until they were ossified. They are often broken when there is no ossification, at the same time that the ribs themselves are broken. Sometimes they are broken alone. Not unfrequently, also, the separation takes place at the precise point of junction between the two.

Pyper relates a case in which the sternum was broken in a man aged 25 years, and also the cartilages of the sixth, seventh and eighth ribs of the right side, as was proven by the autopsy, yet the ribs were not ossified. The vena cava ascendens was also ruptured by the force of the compression.†

Etiology. The causes are the same which produce fractures of the ribs, yet it is generally understood that it will require greater force, and that consequently the injury done to the viscera of the thorax will be more complicated and intense.

In the reports of the Massachusetts General Hospital, an account is given of the case of a man aged 30, who was crushed by the fall of a heavy weight upon his body, and who died after about sixty hours. An examination after death, revealed a fracture of the cartilages of the third and fourth ribs, with a laceration of the intercostal muscles to such an extent that a hernia of the lungs had occurred at this point. This hernia had been discovered and

* Boston Med. & Surg. Jour., vol. lii, p. 316.

† Rankin's Abstract, vol. i, p. 147, from *The Lancet*, Oct., 1844.

recognized, by Dr. Warren, soon after the accident occurred; the protrusion being at that time as large as the clenched fist and regularly rising and falling with each movement of respiration. It was accompanied, also, with a moderate emphysema.*

Pathology. The fracture is clean and vertical, or transverse; never irregular or oblique. The direction of the displacement varies as in fractures of the ribs, but the anterior or sternal fragment is generally found in front of the posterior or spinal.

Union takes place in these fractures, not through the medium of cartilage, but of bone. Sometimes the new bone being deposited only between the ends of the fragments, in the form of a thin plate, and at other times, it is formed around the fragments as well as between them. The latter of these two processes has been most frequently observed. The ensheathing callus appears to be supplied by the perichondrium, while the experiments of Dr. Redfern render it probable that the intermediate callus may result from a conversion, or transformation, of the adjacent cartilaginous surfaces. Paget remarks, also, that the ossification extends to the parts of the cartilage immediately adjacent to the fracture.

I do not know that any observations have been made upon the repair of these cartilages in very early life, and it is possible that the process may differ from this which has been described as it has been observed in the adult.

Treatment. The treatment need not differ from that already recommended for fractured ribs.

ART. II.—*Reduction of Dislocations of the Femur by Manipulation.*
Fragments of the Literature of this method. By FRANK HASTINGS
HAMILTON, M. D.

(Continued from Page 520.)

Kluge directs in case of a dislocation of the hip upwards and backwards, that the patient should be placed upon his back and his body well secured by towels; an assistant must now flex the leg upon the thigh, and the thigh upon the body, at the same moment rotating the knee inwards and abducting the thigh. The surgeon will then lift the thigh and give it a slight pull

* Boston Med. and Surg. Jour., vol. xxviii, p. 158.

or twist. *Chelius' Surgery*, vol. ii, p. 241; from *Sich, G. R., Dissect. de lux. Femoris. Berol.*, 1823, p. 26.

Wattmann places his patient also on his back, and making use of straps with one or two assistants, in case the dislocation is upwards and backwards, he either draws the thigh in its own axis downwards, and by the aid of the thigh strap outwards and downwards, or he seizes the limb at the knee and ankle, and then slowly lifts it forwards, until the thigh is at right angles with the body. If now the thigh is found to rotate outwards by its own inclination, and in a manner which the hands of the surgeon cannot resist, the movement of the head of the femur over the socket is declared, and it only remains to let the limb fall gradually downwards until it lies close to the other upon the bed. Thus the reduction is accomplished. These movements are varied in the other dislocations of the hip to suit the action of the muscles. *Chelius, op. cit.*, from *Wattmann. Vienna*, 1826.

According to Rust's plan the patient is also laid upon his back; then bending the thigh upon the body, and while extension and abduction is made by an assistant, through the action of the muscles, "it springs into its socket with an audible noise, and without the employment of any considerable degree of extension being requisite." *Chelius. Note by South*, from *Richter*, p. 708. 1828.

"Colombat proposes a mode of reduction which he has always successfully employed without assistance and without pain to the patient. The patient stands upright upon the undislocated limb, his chest bent forwards and resting on a table or high couch, with his hands grasping the opposite sides of the table or couch, to keep his body immovable during the operation. The surgeon places himself behind the patient, on the inside of the dislocated limb, if the dislocation be forwards; but on the outside, if it be backwards. He puts first one hand above the tarsus, to bend the leg upon the dislocated thigh; the other hand, which lies behind the knee, is employed to make gradual pressure from above downwards, for the convenience of extending the muscles. With the first hand he imparts to the limb gentle motions from right to left, and from before to behind, in order to overcome the opposition of the muscles of the thigh, and to render the head movable, which then moves from the place in which it is, and enters the socket with a noise." *Chelius. Note by South*, vol. ii, p. 241. 1830.

"The following interesting case of compound dislocation of the femur was communicated to me by my former pupil, Dr. Walker, of Charlestown, near Boston, in North America:

"CASE LXIII. "The patient, while driving a wagon laden with many tons weight of manure, seated upon the "spire," received a blow which threw him upon the ground, and, as he describes, resting upon his elbows and knees. In this position the wagon passed over the posterior part of his pelvis and right thigh, forcing the head of the femur out of the acetabulum forwards upon the groin, lacerating the soft parts and pressing the head through the integuments. This was, in fact, the state of things when I was called to him. The man was extremely muscular, and having been drinking freely, though not to intoxication, his muscles were greatly agitated. He was restless, and complained of great suffering: the diagnosis was extremely easy, every symptom of dislocation on the pubes being present. By the concurrent advice of my friend Dr. Shurtleff, in whose service the patient had received the injury, I proceeded to make an immediate effort at reduction, in the manner directed in your inestimable treatise, excepting that, having no pulleys, we availed ourselves of manual assistance. The efforts at reduction produced great suffering, but did not succeed in removing the head of the bone from its new situation, notwithstanding the extension was made by several strong men, and in a variety of directions. Foiled in my first attempt, I placed my patient in bed, had him largely bled, and gave him a powerful dose of laudanum. Early the next morning I visited him, and found him calm, free from pain, and evidently under the influence of opium, and in every way well fitted for a further attempt at reduction, which I determined upon attempting with the use of the pulleys. My friend, Dr. William Ingalls, who was now present, requested he might be first allowed to make an effort without the pulleys, and, to my astonishment, he succeeded in replacing the head of the bone in the acetabulum in the following manner: By his direction an assistant, taking the ankle of the dislocated limb in his right hand, and placing his left in the ham, bent the leg at right angles upon the thigh, and the thigh upon the pelvis, then lifting with a power little more than sufficient to elevate the whole limb, he carried it to its greatest state of abduction, at the same time rotating the femur inwards while Dr. Ingalls passed his thumbs through the wound, and pressing upon the head of the femur directed it towards the acetabulum. At this moment he directed the limb to be forced towards its fellow, by which the reduction was effected with the greatest ease and elegance. Whether the same manner would succeed in other luxations upon the pubes I know not, but here I

state facts. I regret to add, that extensive suppuration proved fatal to our patient at the end of about three weeks." *A Treatise on Dislocations and Fractures of the Joints. By Sir Astley Cooper. Edited by Bransby Cooper. Amer. Ed. 1851. (The English edition was published in 1842.)* p. 119.

"*Dislocation of the Femur on the Dorsum Ilii, reducible without Pulleys, or any other Mechanical Power. Three Cases. An Essay read before the Monroe County Medical Society, at its annual Meeting, in the city of Rochester, on the 8th May, 1850. By W. W. REID, M. D.*

"DR. FLINT,

"Dear Sir:—The following paper was read before the Monroe Co. Med. Society, at its annual meeting, in the city of Rochester, on the 8th of May, 1850. For reasons, which are obvious, and *some, which are not so obvious*, I am induced to offer it for publication in your Journal. If you deem it admissible, and worthy, will you give it an insertion in your next number.

"Respectfully and truly yours,

"Rochester, June 24th, 1851.

W. W. REID.

"GENTLEMEN: I propose to show that dislocation of the femur on the dorsum ilii, may be reduced without pulleys, without Jarvis' adjuster, without Fanhestock's twisted ropes, without an assistant, in less time, and with far less pain, than by any mechanical means whatever, simply by the hand and strength of the operator alone.

"The announcement of a proposition so novel, so ultra, and contradictory to the teachings of all standard writers on surgery for the last hundred years, exposes me, I am aware, to the sneers of some, to the pity of others, and to the charge of rashness, by all, and requires that I make good my statement by undoubted and substantial proof.

"The subject matter of this paper has been written, but withheld from the public and profession, several years, principally for two reasons:

"*First.* The theory and practice here recommended are so diametrically opposed to all our highest surgical authorities, whether among the living or the dead, that I have shrunk from the obloquy and opprobrium that are apt to attach to an innovator upon long established opinions, dogmas, and practices, especially when held and taught by men in our profession of profound science, and practical skill.

"*Second.* I had to wait some four or five years for an opportunity to put to the test this mode of reducing a luxation of the hip-joint, before a case presented itself in my own practice. In the spring of 1844, the first oppor-

tunity offered, but as 'one swallow does not make a summer,' I was still unwilling to venture before the profession, although so far as one case could establish a principle, this one did so, as we shall see directly. During the past year, (1849,) two other cases have fallen into my hands, and have rendered what was before certain to my own mind, 'doubly sure.'

Dr. Reid then proceeds to describe the "mental process, the observations and experiments" by which he arrived at his conclusions; after which, he adds:

"The conviction was so strong in my mind that this method was certain and practicable, that I no more doubted it then than I do now, after having demonstrated it in three several instances, two of which were within the last year. And so impatient was I to put my theory to the test, that I believe I almost wished every day (wickedly perhaps) that some one would dislocate his hip, and give me an opportunity to reduce it.

"I was aware that Professor Nathan Smith, of New Haven, had, in his day, taught in his lectures, a somewhat similar method,—perhaps the same; but none of his pupils, whom I had ever met, could describe either his method or the rationale of it. I had seen, too, his memoirs, published by his son, Professor N. R. Smith, of Baltimore, but he confesses that he did not recollect the teachings of his own father, and that he, the elder Smith, had left no notes or records of his doctrines or practice. Dr. N. R. Smith, however, proceeds to give what seems to him the probable doctrines inculcated by his father, and gives directions for reducing dislocations of the hip, with drawings illustrative of his method. But it is apparent, that, when he wrote his book and gave these directions and illustrations, he had never reduced a hip by his method. For his directions require impossibilities, and his illustrations are mere fancy; no such thing in nature can exist. For to *abduct* a thigh dislocated on the *dorsum* of the *ilium*, before flexing it on the pelvis, or to *abduct* and *flex* at the same time, as he directs, is absolutely impossible, without rupturing the obturator externus—and to rupture this, in order to obtain flexure, would require the power of many men;* *but to flex the leg first on the thigh—then adduct the thigh, carrying it even over the sound*

* NOTE.—Dr. Reid has scarcely done justice to the method of procedure described by Dr. Nathan R. Smith, when he understands him to say, that in carrying the limb up it is to be abducted forcibly, or more than the limb is capable of being abducted without doing violence to any of the muscles; since Dr. Smith says distinctly, as I have quoted at p. 510, that the thigh is to be abducted only "slightly," before it is flexed upon the body; and not until the thigh is flexed "freely" upon the body is the abduction to be completed.

one and at the same time, flex the thigh on the pelvis, carrying the knees over and upwards by a kind of semi-circular sweep, is a very different and a very easy thing."

Dr. Reid proceeds to relate three cases in which he has succeeded by this method in reducing dislocations of the hip, and to describe other experiments made in connection with Prof. Moore, of Rochester, with a view of determining what constituted the real obstacles to the reduction. From all of which he deduces the following conclusions:

"1. The chief impediment in the reduction of dislocations, is the indirect action of the muscles that are put upon the *stretch* by the mal-position of the dislocated bone, and not by the *contraction* of the muscles that are shortened.

"2. That muscles are capable of so little extension, without hazard of rupture, beyond their normal length, that no attempt should be made to stretch them further, in order to reduce a dislocation, if it can possibly be avoided.

"3. The general rule for reducing all luxations should be, that the limb or bone should be carried, moved, flexed or drawn, in that direction which will relax the distended muscles.

"4. Dislocation of the hip on the *dorsum ilii*, an accident so serious to the patient, and so formidable to all surgeons, is reduced with the greatest ease, in a few minutes, without much pain, without an assistant, without pulleys, without 'Jarvis' adjuster,' or any other mechanical means, simply by flexing the leg upon the thigh, carrying the thigh over the sound one, upward over the pelvis, as high as the umbilicus, and then by *abducting* and rotating it."—*Buf. Med. Jour.*, vol. vii, p. 129 et seq. (Aug., 1851.)

(To be Continued.)

ART. III. — *Albuminuria, Independent of Organic Disease of the Kidneys.* Read before the Medical Society of the County of Erie, at its Annual Session, January 12th, 1858. By JAMES M. NEWMAN, M. D., Secretary of the Society.

Gentlemen of the Medical Society of the County of Erie :

You conferred upon me the honor of addressing you, at this our Annual Session. When the designation of *Orator* was made, I was in hopes that some opportunity would be afforded me of presenting to you a paper, which would have at least the merit of originality in observation, and that the study of some particular form of disease would enable me to deduce some results which might be made valuable as a means of diagnosis, or prognosis,

at least, even if I might not be so fortunate as to add to our stock of knowledge upon the subject of treatment. But no such opportunity has been afforded me. Our country has been scourged by no pestilence, and the uniform prevalence of health has furnished too few examples of any specific form of disease to enable me to execute such a purpose: nor have I even had the means which ordinary hospital practice furnishes for observation. I am, therefore, compelled to come before you, confessing that my own desires have been unaccomplished, and claiming your indulgence for the presentation of a paper which makes no claim to originality of observation, and which will, perhaps, simply recount pathological phenomena, already known to all of those present.

I have thought it might not be entirely devoid of profit, if I should improve the present opportunity to weave together the scattered and isolated facts which have been observed in reference to the presence of *albumen* in the urine, or that pathological condition which is usually known as *albuminuria*, and the connection of that condition as a simple concomitant of the ordinary forms of disease, as well as one which results from positive changes in the anatomical character of the kidneys; and to suggest the enquiry from the facts so collected, how far the presence of albumen in the renal secretions is to be regarded as diagnostic of pathological lesions in the organs.

It is hoped that the want of originality in the subjects presented, will be partially compensated to the Society, by furnishing it with a means of reference upon the several points which may be discussed.

It is, perhaps, no exaggeration to say, that since the discovery of the connection of the presence of albumen in the urine, with those forms of granular degeneration of the kidneys, to which the name of the discoverer has so justly furnished the nomenclature of the disease, that to the minds of the profession, such a condition of *albuminuria*, however expressed, is simply a synonym of *Bright's disease*. It is true, that no serious harm probably grows out of so alarming a prognosis, as must be generally drawn from a diagnosis based upon a theory of the universal dependence of this condition upon positive changes in the structure of the kidneys. The truth, however, upon these points is as desirable as in any other branch of medicine.

The continuous attention which has of late been directed to the investigation of the changes produced in the blood and urine, through the influence of morbid actions in the body, and to which Bright's discovery undoubtedly furnished a grand impetus, has unequivocally demonstrated that such changes are wrought in the fluids and excretions, and such modifications impressed upon the normal action of the organs, by a multitude of the ordi-

nary forms of disease, that the secretion of the kidneys becomes charged to a greater or less degree with albumen, and this too without the infliction of positive, or at least permanent impairment of the integrity of these organs. The evidence upon which the latter assumption is based, it is true, is rather of a negative than of a positive character.

That albuminous urine is frequently found associated with various forms of disease, acute as well as chronic, can not admit of question; and in the absence of the revelations of an actual autopsy, the evidence drawn from the suddenness of its development in the course of acute diseases, its fugitive character, its complete subsidence, and the perfect restoration to a condition of health, is of such a nature as to carry conviction that the renal organs have suffered simply a functional disturbance, rather than an organic change.

To detail some of the particular forms of disease in which this albuminous urine manifests itself, and to describe the peculiar circumstances accompanying its manifestation, is our purpose at this time. We shall make such allusions to the pathology of albuminuria as may be necessary to render more complete the subject; but we fear, that after a disclosure of all that is known in reference to it, the admission will be forced from us, that notwithstanding all the advances which have been made, our real knowledge of the etiology of albuminuria is imperfect, and most unsatisfactory.

A train of peculiar symptoms are not unfrequently developed in Bright's disease, due to the contamination of the blood from the excrementitious constituents of the urine, to which the names *uræmia*, or *uræmic intoxication*, have been given.

Early in Bright's disease, the patient often complains of head-ache, or of a confused sensation in the head; the eyes grow dull and expressionless; he is forgetful and indifferent; and slow and inactive in movement. These symptoms may diminish, or disappear entirely, if the urinary secretion become more abundant. In other cases, they increase in intensity, the drowsiness passes into stupor, and coma becomes complete, and the respiration becomes stertorous. Delirium is an infrequent symptom. Convulsions frequently precede death. Vomiting is also one of the most early symptoms of uræmia. Two forms of uræmia are recognized, acute and chronic. The acute is developed suddenly, and manifests itself by depression of the function of the brain, by irritation of the spinal cord, and by both these sets of symptoms combined.

The uniform and perfect parallel between this train of symptoms, and

those developed in the progress, and as a consequence of temporary albuminuria, will not fail to attract attention. In the cases of temporary albuminuria attendant upon, or developed in the course of some other form of disease, the condition of uræmia is that of the acute form, and perhaps, most frequently manifests itself by disturbance of the functions of the brain and spinal cord. An attack of convulsions may be the first intimation we have to lead us to suspect an abnormal condition of the blood and urine.

It is a little remarkable, that notwithstanding the amount of study that has been devoted to this subject, and the zeal and industry with which the investigations relative to the changes which take place in the blood necessary to cause the symptoms of uræmia have been pursued, so little is known relative to the exact changes and conditions necessary to their development. A great discrepancy of opinions exists among the students of this subject, as to the precise changes which occur within the blood, and which combine to cause that condition of blood-poison which results finally in the development of the train of symptoms we have described.

Elimination of albumen by the kidneys doubtless impresses a change upon the blood, and impoverishes it of one of its elements necessary to the perfection of its office in supporting the integrity of the entire system; but the symptoms of uræmia point to the retention at the same time, of some principle within the circulation, which acts as an irritant to the nervous centers, and induces finally death by coma, or convulsions, or both. This result is generally stated to be caused by the retention of urea within the circulation. But that such retention is actually the case, our chemico-pathologists seem to be by no means agreed. The testimony of repeated experiments, and the weight of authority would seem to be, that the presence of urea in excess in the blood is not sufficient to induce the symptoms to which the name of uræmia has been given.

Frerichs has lately proposed a theory, that the symptoms of uræmic intoxication arise in consequence of the urea accumulated in the blood being converted *by the agency of a suitable ferment*, into carbonate of ammonia, while yet within the vessels. For the supervention of uræmic intoxication, he holds, two agents are necessary: First, an accumulation of urea in the blood; secondly, the presence of a ferment, by the agency of which the decomposition of the urea may be effected. He offers no proof of the existence of this ferment, except such as is derived from the manifestation of its effects. He regards it present in many, if not in all diseases, and as easily developed by

morbid impressions upon the system, and that diet alone may exercise some influence in the decomposition of the urea.

This, of course, is a theoretical view, which will require the confirmation of repeated tests to establish its validity. Its correctness has been questioned by Dr. Ed. Schottin. He denies the sufficiency of the tests proposed by Frerichs to prove the presence of the carbonate of ammonia in the blood, and refers its existence, when detected in the breath of the patient, as he has frequently done, to the results of the decomposition of the secretions of the mouth. While Dr. Schottin dissents from the opinions of Frerichs, he admits the insufficiency of the mere retention of the urea in the blood to develop the symptoms of uræmia, and proposes the following very *simple* and *perfectly intelligible* theory to account for the symptoms present: he believes "that the cause of uræmic poisoning must be looked for in an impediment of the metamorphosis of the tissues, in a destruction of the process of endosmose and exosmose between blood and tissues, and perhaps, in a generally diminished oxidation power in the blood!"*

Too little is known yet upon the subject, to make it profitable to follow out the numerous surmises and theories of those who are engaged in the investigation of this abstruse subject. We must be content with the contemplation of phenomena more apparent to the senses, and seek for such causes as will admit of simpler explanations. The peculiar physiological act concerned in the excretion of the albumen by the kidneys seems to be no better understood. In consequence of the interruption of the normal action of the kidneys as secreting organs, either as the result of positive changes in their anatomical structure, or as the consequence simply of a disturbance and interruption of the healthy functional action of these organs impressed upon them by the disturbing influences of disease present in the system, or as the result of impaired freedom of the circulation from mechanical obstructions and pressure, we obtain a train of perverted actions within the system, which is marked, among other manifestations, with the excretion of albumen with the other constituents of the urine; a circumstance and condition so incompatible with the health of the individual, that additional, (and if not speedily relieved,) fatal symptoms are induced.

We do not see that the sum of our knowledge of the pathology and etiology of this disease extends much beyond this.

The physical agency of a faulty, or imperfect performance by the kidneys of their duties as secreting and excreting organs, in permitting the escape of

*British and Foreign Medico-Chirurgical Review, July, 1853, p. 207.

unusual compounds, or in failing to discharge those which they were especially designed to do, are modes of action more within the cognizance of our senses, and the compass of our present means of investigation; although it may well admit of a doubt whether such perversion of the proper functions of these organs is not among the secondary causes concerned in developing the peculiar symptoms which accompany them.

Positive lesions of structure of the kidneys have so apparent an influence in the production of these symptoms, that their agency is no longer questioned. They stand related to each other as cause and effect; the presence of one without the development of the other, would be scarcely looked for, and be but an occasional exception to the rule, which would prompt the observer to further investigation to discover by what means the individual had escaped the usual results of an irreparable injury to a vital organ.

Functional disturbance alone, is now deemed sufficient to develop all the symptoms accompanying the more serious pathological injuries of these organs. To renal congestion is assigned the rank of one of the most (and probably the most,) important cause of albuminuria. There is a striking unanimity among authorities in admitting such a cause as sufficient for the development of the usual symptoms of this disease. In experiments in which such congestion has been artificially produced, such a train of symptoms has speedily ensued. In the human body, renal congestion, whether produced by some mechanical pressure, as of the gravid uterus, or a tumor, upon the renal veins, or resulting from disturbance of the circulation, or impairment of the blood from disease, is capable of developing this condition of albuminuria, from which the system may sufficiently early react, to leave behind it no traces. In more unfavorable cases, where this state of congestion is owing to some cause of obstruction not immediately removable, as the pressure of the uterus during gestation, the condition of uræmia may become so intense that the nervous centers respond to the source of irritation, and convulsions be induced.

It is said to be scarcely possible to account for the development of albuminuria in the exanthemata especially, upon any other hypothesis. The rapidity with which these diseases run their course do not give time, in the absence of previous lesions of the kidneys, to produce those serious changes requisite to induce uræmic symptoms, and the system generally reacts immediately and perfectly upon the removal of the pressure of the existing form of acute disease. And where albuminuria is developed in the course of other diseases, its presence is attended with those circumstances, which force upon the mind the conclusion that its temporary character is depen

dent upon some interference for the time being, with the true functional performance of those organs, and that they are laboring under a load greater than they can carry with safety.

The development of albuminuria in the progress of diseases, acute in their character, and sufficiently severe to bring the whole system under their influence, and marked with general depravation of the vital energies, is suggestive of the enquiry whether the kidneys, after all, may not be simply responding to the impressions produced upon the organs generally, by the conditions of disease present; that the products of their secretions are faulty, because they are called upon to act upon a fluid impaired by general disease; that within the blood itself may be found the causes which excite the renal organs to an imperfect performance of their duties.

Dr. Walshe* has lately proposed the doctrine that Bright's disease (albuminuria,) is not essentially a renal disease, but is essentially and primarily a blood disease, "That Bright's disease is a blood-disease, *ab initio*, essentially tending to chronicity, though (like cancer and phthisis,) sometimes running an acute course." We shall not attempt to follow the argument with which he seeks to establish this view of the subject, nor attempt to prove, or invalidate his doctrines.

Dr. Walshe, in a clinical lecture published in the London Lancet, April 21st, 1849, discussed the subject of the presence of albumen in the urine, noting the various circumstances under which it may be eliminated. The causes of its elimination, he arranges under the four general heads: 1. Morbid states of the Blood; including scorbutus, purpura, hæmorrhagic or "malignant" forms of eruptive fevers, pyohæmia? absorption of albuminous (dropsical) effusions? 2. Morbid states of the urinary organs—functional and organic. 3. Accidental admixture of genital albuminous products—natural and morbid. 4. Doubtful agency in acute febrile affections, exanthemata, phthisis, pregnancy, gout? hysteria? chylous urine, use of certain foods and medicines.

Under the above general classification, Dr. Walshe proceeds to arrange all the numerous causes which have been assigned as sufficient to develop a state of albuminous urine. His own experience, however, has not served to substantiate all the positions therein assumed. In the first class of cases, he has not been able to verify the fact of its dependence upon the morbid states of the blood, and the statement is made upon the authority of others. Dr. Blackall was the first to state that the urine may become coagulable in

* Rankin's Abstract, No. X., 1849, p. 78.

cases of scorbutus and petechia. Rayer and Heller also affirm the same fact. Dr. Finger, whose statistics we shall hereafter quote, is disposed to conclude, that in cases like the greater part of those he has given, where albumen appears in the urine along with a fibrinous or purulent exudation into some organ of the body, it is in consequence of these exudations being re-absorbed into the blood, and evacuated as effete matter by the kidneys. In support of this view, he gives three cases where albumen appeared in the urine simultaneously with the formation of abscesses in different parts of the body; and in two of which it was observed to disappear rapidly on the abscesses being opened, and the pus evacuated.

But turning aside from the consideration of the pathological questions suggested in the discussion of this subject, which, notwithstanding their deep interest, are involved in such obscurity as to prevent our deriving from them those lessons of practical value to be desired, we propose to briefly notice the forms of disease, the progress of which at times are marked by the development of albuminous urine, as well as notice some of the modes by which the accompanying state of uræmia manifests itself in impaired and perverted action of the nervous centers.

Dr. Finger, of Prague, in 1847, published the results of the examinations of about 600 medical cases, of various kinds, occurring in the general hospital at Prague, among which albuminous urine was found in 155. Among these were:

	Cases.	Albuminuria in
Tuberculosis, ...	186	46
Typhus, ...	88	29
Puerperal Fever, ...	46	32
Carcinoma, ...	14	6
Chlorosis, ...	6	2
Acute Rheumatism, ...	18	0
Ague, ...	10	1
Pneumonia, ...	33	15
Pleurisy, ...	14	2
Peritonitis, ...	6	2
Chronic Catarrh, ...	16	3
Diarrhoea, ...	65	8
Disease of Heart, ...	18	7
Epilepsy, ...	2	2
Chorea, ...	3	0
Paralysis, ...	6	0
Tetanus, ...	2	0
Hysteria, ...	3	0

Of the 46 cases of tuberculosis with albuminous urine, 35 died: in 19 of these there had been cedema of the lower extremities, leading to a suspicion of granular disease of the kidneys, which was nevertheless, found to exist in two cases only.

Of the 29 albuminous cases of typhus, 17 died; the kidneys were sound in all the cases. The albumen appeared in the urine generally from the sixteenth to the twenty-fifth day, while the disease was on the increase or at the height; in those which recovered, it uniformly declined and disappeared during the convalescence.

The large proportion of cases in which puerperal fever was accompanied by albuminous urine, is explained by the admixture of the urinary and lochial discharges; in 6 cases, however, which were fatal from peritonitis, and in which the kidneys were sound, the albumen continued to present itself in the urine after the disappearance of the lochia.

In 4 of the 6 cases of cancer, the albumen was evidently from the admixture of uterine discharges. The kidneys were sound in all.

In 9 of the cases of pneumonia, the albumen disappeared from the urine during convalescence. In 6, which died, the kidneys appeared sound.

In the two cases of epilepsy in which albuminuria was discovered, the albumen presented itself only after a convulsion, diminishing, and gradually disappearing after the lapse of thirty-six hours.

M. Martin Solon has calculated that albumen appears in one-eleventh of the cases of acute disease. M. Becquerel affirms that he ascertained its existence in some eighteen cases of acute rheumatism. Dr. Walshe has seen two or three cases of phthisis, in which the urine became temporarily albuminous, without any attendant local or general symptoms, which could be supposed to indicate serious renal disease.

The statistics of Dr. Finger exhibit, to a certain extent, the frequency with which albuminuria occurs as a complication of other forms of disease. In his statistics, thirteen distinct forms of disease are indicated where albuminous urine was detected. He has been careful too, to indicate the accidental circumstances upon which its presence might be accounted for without involving the question of the possible want of integrity of the kidneys. Seven of these may be ranked among acute diseases; the balance, including tuberculosis, carcinoma, chlorosis, chronic catarrh, disease of the heart, and epilepsy may be deemed of such permanency as to allow of a more or less complete deprivation of the entire system, and conduce to a faulty action of the several organs.

The more important acute diseases in which albuminous urine has been

detected and made the subject of especial study, are scarlatina, variola, erysipelas, typhus, cholera, pneumonia and pleurisy.

Scarlatina.—The tendency of scarlatina patients during the period of desquamation to become anasaruous, and to become suddenly the subjects of convulsive seizures, has escaped the notice of no observer. In a very large proportion of these cases of dropsy, albumen will be found present in the urine. Martin Solon, of Paris, says he has found albumen in the urine in twenty-two out of twenty-three cases. Dr. Begbie affirms that his observations very nearly confirm this statement. This proportion is higher than admitted by many other observers. Becquerel says it is by no means rare. F. Simon says that albumen is commonly, but not always, found in the urine during desquamation. Dr. Christison, from his own observation, confirms the testimony of its frequency; and doubtless the results of nearly all observers would go to swell, if it were needed, the evidence in favor of this occurrence. As an example, however, of the discrepancy in the results of observations upon such points, it may be stated that Philip, in Berlin, where scarlatina was very prevalent, and anasarca could not be warded off, found at least sixty cases in which the urine was tested, both by heat and nitric acid, and no traces of albumen could be detected.

Dr. John W. Tripe, in a valuable statistical paper upon *Scarlatinal Dropsy*,* says "The urine usually contains, at some period or other of the eruptive or desquamative stage, a greater or less quantity of albumen for a shorter or longer duration. In some cases I have detected it in the urine in the morning and not in the evening, or *vices versa*; sometimes only in one specimen during the whole period of the disease. Besides albumen, we also meet with a variable quantity of renal epithelium in the desquamative stage; sometimes fibrinous casts of the renal tubules, containing either epithelial cells or blood-corpuscles; and sometimes free blood-corpuscles. In some cases none of these abnormal constituents appear until the dropsy shows itself, but more generally they occur as above stated, and continue until the supervention of the dropsy. As a rule, when these abnormal constituents, or either of them, persist in the urine for more than ten days after the disappearance of the rash, and especially if they increase in quantity, we may expect an attack of dropsy."

This paper of Dr. Tripe bears the marks of the diligent student, close observer, and pains-taking statistician, and in the quotation just made, we think

* British and Foreign Medico Chirurgical Review, Jan., 1854, p. 187.

may be found the key by which to solve the apparent discrepancies we have noticed in the results of other and different observers upon this point.

Dr. Christison has suggested that a difference in type in different epidemics, or at different periods in the same epidemic, and possibly a controlling, or modifying influence of treatment may account for the absence of the albumen at times.

In favor of this view, Dr. Begbie * says, "Scarlatina, which, previous to 1848, had not been for some years prevalent in Edinburgh, became, towards the middle of that year, decidedly epidemic. The writer was then residing as physician's clerk to the Royal Infirmary, into which there was admitted a large number of patients suffering from scarlatina. The urine of almost all these cases were examined daily, and the result was, that in twenty-one consecutive examples, the presence of albumen was detected during the progress of desquamation of the skin. At nearly the same period, Dr. Newbigging, in John Watson's Hospital, was engaged in making observations on the urine, and arrived at the same results. At a period subsequent to this, Dr. Andrew Wood, and with opportunities very much the same, examined the urine daily in a large number of cases, and found coagulability in less than half. Since then, Mr. Benjamin Bell and Dr. Jas. D. Gillispie, the former in George Watson's, the latter in Donaldson's Hospital, have made frequent examinations of the urine, in all cases of scarlatina which occurred during the epidemic prevalence of the disease in these institutions, and have found no case of albuminuria separate from dropsy."

Dr. Begbie says, however, "the fact of the urine not having been examined daily, invalidates, to a certain extent, in his opinion, the experience of Mr. Bell and Dr. Gillispie," and insists upon the importance of daily examinations, and affirms he has "seen the presence of albumen in more than one instance limited to a day, and in several not continuing beyond two." This is confirmatory of the statement of Dr. Tripe.

One of the most formidable complications of scarlatinal dropsy is uræmia. Dr. Tripe says that, "When well marked, the symptoms are convulsions or coma, or both, occasionally delirium, with the suppression of, or a great diminution in, the secretion of urine, and consequent retention of the urinary constituents. But although coma or convulsions constitutes one of the predominant symptoms, yet in making a *post mortem* examination, we rarely detect any morbid alteration. Sometimes, when the symptoms have come

* British and Foreign Medico-Chirurgical Review, July, 1853, p. 39.

on gradually, we meet with indications of slight inflammatory disease; yet, in the generality of cases, the quantity of fluid in the ventricles and arachnoid cavity is but little, if at all, above that of health. In my own cases, I did not detect any morbid products, and Frerichs makes a similar statement, having never met with more than a slightly increased amount of fluid, the largest quantity not exceeding one ounce."

Cholera. The presence of albumen in the urine of patients suffering from epidemic cholera has been demonstrated by Heller, Parks, Levy, Martin Solon, Rostan, Robertson, Begbie, and Thompson.*

In a report made by Dr. James W. Begbie in November, 1849,† of the results of observations made in a Cholera Hospital, upon the urine passed first after recovering from a state of collapse, he says:

"Of sixty-seven urines tested for the presence of albumen, by the application of heat, and the addition of nitric acid, in sixteen the urine was noted as being coagulable, or decidedly coagulable; in seventeen as being highly or powerfully coagulable; in twenty as slightly or faintly, or very slightly or very faintly, coagulable; in fourteen there was no coagulability.

"In a number of those in which albumen existed, subsequent examinations were made, at an interval of one or two days, with the effect of finding that, at the second examination, in most it had partially disappeared, and that in a very few it was present in the third. In one or two instances, the first urine voided was not coagulable, but a subsequent examination detected a very small amount of albumen. In all, the albumen, though present at the first examination, even in large quantity, was but transient in duration."

"It is of interest to observe the circumstances with which the presence of albumen in the urine of cholera is attended; generally bile co-existed with it, if not throughout its entire duration, at least at its commencement, or before its disappearance; further, albumen was always associated with, and in general held a ratio commensurate with the amount of epithelium found on microscopic examination. Taken in connection with the former, its presence, as indeed that of the secretion itself, is an indication of a most favorable tendency, nothing less than that of commencing convalescence, the bile almost always manifesting its presence in the urine at the period when it reappeared in the stools."

* British and Foreign Medico-Chirurgical Review, July, 1853, p. 41.

† American Journal Medical Sciences, Jan., 1850, p.p. 250-'52.

Dr. R. D. Thomson, of Glasgow, says,* "That the urine, in the biliary (or febrile) stage, in several cases contained albumen, but presented scarcely any other deviation from the urine of health, except in the amount of urea, which at first was deficient."

In reference to the appearance of albumen in the remaining acute diseases in the list, we shall quote from a paper of Dr. J. W. Begbie, published in 1853.†

Pneumonia. "The presence of albumen in the urine of pneumonia, about the period of the resolution of the disease, has been noticed by Becquerel, Simon, Andral, Finger, Heller, Aitken, and others. The writer has frequently observed it. Though by no means constant, Heller has found the coagulability of the urine in pneumonia to be very frequent. Simon, at the period of crisis, found the urine albuminous in twenty-two out of twenty-four cases. Becquerel and Andral have noted the coagulability of the urine during the inflammatory stage of the disease in a few cases. The writer's own observation has satisfied him that the appearance of albumen in the urine, even in considerable amount, is by no means an unfrequent phenomenon at about the period of resolution in pneumonia. In eleven cases where the inflammation was highly sthenic in character, where condensation rapidly occurred, and in which the period of resolution was well marked, he found the urine coagulable. The coagulability of the urine in pneumonia has been associated, and apparently upon reasonable grounds, with the resolution of the disease, with the absorption of the pulmonary exudation, and the return of the lungs to its healthy condition. The period of its recurrence, and certain other of the characters the urine presents, favor the idea. Schönlein, and others, have indeed shown, and their view is generally believed, that it is by the kidney, as an emunctory, that the great mass of the exudation in cases of inflammation of the lungs, as well as of other organs, is removed from the system. In the case of pneumonia, the albumen is accompanied by a deposit of amorphous, sometimes of crystalline lithates. Heller makes the interesting remark, that he has found the albumen in something of an inverse ratio to the chlorides: that is, at the commencement of exudation, when the amount of chlorides continues normal, he has failed to detect albumen, but as the exudation increases, and the chlorides dimin-

* American Journal Med. Science, July, 1850, p. 189.

† British and Foreign Med. Chirg. Review, July, 1853, p. 35.

ish, he has found the albumen to appear, and to continue present for a considerable period.

"In acute *pleurisy*, Heller has occasionally found the urine coagulable at the period of absorption. In acute inflammations of the heart, he has also found albumen in the urine, more frequently in *pericarditis* than in *endocarditis*. In *peritonitis* he has frequently found coagulability of the urine.

"*Variola*. In variola there are just as in the other febrile diseases, two periods when the presence of albumen in the urine may be detected, in the early febrile, and in the suppurative or critical stage. In five out of eleven cases, M. Solon found the urine coagulable. The writer relates three cases, two of which were fatal, in which the urine was highly charged with the blood. One was preceded, and the other followed by albuminous urine.

"*Erysipelas*. During the acute stage of the disease, the urine always presents, in a high degree, the characters of febrile urine. In two out of five cases during this period, Becquerel detected albumen. In four out of six cases, Dr. Begbie found the urine at the same stage of the disease albuminous, while in three of the four the albumen was associated with blood.

"At the period of desquamation, after acute attacks of erysipelas, more especially if a considerable extent of the skin has been affected, it is not unusual to find the urine coagulable. Occurring at this, the desquamative stage of the disease, the coagulability may last for several days, and while it exists, the urine is generally charged with epithelium derived from the minute renal tubes. Lehmann speaks of the presence of albumen in the urine during the desquamative stage of erysipelas, as nearly as frequent as after scarlatina; and this coincides with the experience of the writer. In many cases of erysipelas, occurring both in hospital and private practice, he found the urine coagulable, and in all such, the coagulability has been associated with the presence of epithelium."

Typhus. In an earlier paper,* Dr. Begbie observes: "I have found albuminuria by no means an uncommon attendant on the convalescence from typhus; not, however, nearly so invariable in its occurrence as in scarlatina, or even so common as in pneumonia; so frequent, however, as to lead me to examine all cases in which it occurred, and that with very great care. The result has been, that no one of any such cases has, either at the time,

* Rankin's Abstract, 1852, No. XVI, p. 102.

or during a considerable period of observation afterwards, afforded the evidence of any organic change in the kidneys to account for the albumen in the urine.

"The albuminuria in the case of typhus appears to me of special interest, as occurring much more frequently, if not entirely, in certain cases of typhus. It is in these cases in which we know, or have reason to suspect, that the deposits, generally called typhus deposits, have taken place in internal organs, that we find albumen in the urine. Two or three observations of a somewhat different nature, have led me to this conclusion; for example, I have found the urine albuminous in cases of abdominal typhus,—that is, in those cases in which we generally find severe diarrhoea as a symptom during life, and deposit in the intestinal glands as the most prominent lesion after death. In several cases of this kind, which proved fatal, I have found albumen in the urine for days before death; and in others, which happily recovered, I have as frequently noticed its occurrence. In both these instances the albumen appeared, for the most part, at an advanced period of the disease, at least after the particular symptoms had continued for some time; while in the former the albuminuria continued up to death; in the latter, in some it disappeared as convalescence was fairly established; and in others it lasted for a longer period. The amount of albumen in these cases, and the other characters with which the coagulability was associated, were exactly as I have described them in an example of pneumonia; and finding the albuminuria to bear a relation to the deposits in the internal organs in typhus, I have been led to regard the kidneys as the emunctories by which the morbid matter so deposited is, to a certain extent, at least removed from the system,—and, so doing, to regard the temporary albuminuria of typhus as a critical albuminuria."

Upon the appearance or non-appearance of albumen in the urine in fever patients, it is claimed that a differential diagnosis may be made out between typhus and typhoid fevers; that albumen is detected in the urine of *typhus* patients, while it is absent in those sick with *typhoid* fever.

In a recent paper, by George W. Edwards, M. B.,* the value of this precipitate, as a diagnostic sign, is very clearly set forth as the result of his investigations upon the subject:

From his observations upon this subject, he sums up the following conclusions as highly probable:

"1st. That *albumen* appears in the urine of *every patient* affected with

* Buffalo Medical Journal, Vol. IX, Dec., 1853, p. 418.

typhus fever at an *early* period of the disease, and that in such cases the urine is of low specific gravity.

"2d. That in the *early stages of typhoid fever*, albumen is absent while on the other hand, the urine has an *unnaturally high specific gravity*, with excess of one of its natural constituents, viz: urate of ammonia; and,

"3d. That the state of the kidneys in either disease compounds with the condition of the urine, these organs being *congested* in *typhus*, and generally *healthy* in *typhoid fever*."

Reference has already been made to the marked disturbance of the cerebral organs, which is not unfrequently noticed as associated with the presence of albuminous urine, where the symptoms are of a sufficiently grave character to indicate the existence of "*Morbus Brighü*." A form of brain affection is described, occurring in connection with the excretion of albumen, as especially characterized by the anæmic aspect of the patient, by a quiet pulse, and frequently only partial coma. If there be any stertor, it is of a peculiar kind, and characterized by a low, hissing sound. Paralysis is not necessarily present, and anasarca is said to be generally absent. This condition of the sensorial functions, it is said, should lead us to look for this affection, even if before unexpected.

We have disturbance, too, of the cerebral organs at times, from the condition of albuminuria, when the history of the case does not confirm the suspicion of the existence of organic changes in the kidneys. The pathological changes wrought in the blood by, or during the state of albuminuria, serve of themselves sufficiently irritating to the cerebral organs, as well as to the nervous centers generally, to impress upon them changes in the modes of their normal functions. The effects of blood-poison are manifested in the disturbance of the mental functions, the impairment of the organs of the senses, and the perversion of the muscular movements. A condition of toxæmia is present, and the system, brought every where beneath its influence through the medium of the circulation, responds to the malign influence.

Convulsions. The nervous centers not unfrequently respond to the conditions of toxæmia, by the development of convulsions. The pregnant female is the subject especially liable to attacks of eclampsia, from the presence of albuminuria, independent of organic lesions of the kidneys. The influence of gestation, in exciting an albuminous state of the urine, is a curious pathological fact which has, until quite recently, escaped notice. Within the last seventeen or eighteen years, and since the attention of the profes-

sion was called to the connection which exists between the existence of albuminous urine and the development of puerperal convulsions, by Professor Simpson, of Edinburgh, this subject has attracted the attention of medical men, and facts sufficiently conclusive have been accumulated to establish beyond a question, the connection of the one state with the subsequent convulsive seizures. The conditions of albuminuria present in these cases are in a large proportion, as their termination would indicate, independent of organic renal lesions, but result from the congestion of the kidneys as a consequence of pressure, or from sources of irritation reflected back upon them from the pregnant uterus.

It is not our purpose, however, to discuss this subject at length; it has been made our duty, at another time, and before another body, to collect the facts having reference especially to this subject.

The organs of sense, or at least some of them, give evidence of the disturbance in their functions, occasioned by the presence of the blood poison. Sight and hearing, especially, not unfrequently become manifestly impaired.

Amaurosis, as a symptom of albuminuria, is probably one of the most marked forms in which the nervous centers manifest the influence of the condition of toxæmia present, short of that of the development of convulsions, or the loss of consciousness in a state of coma, or stupor. As a pathological fact, it is one of intense interest, that an organ of sense should have its integrity so impaired that it ceases its functions, and yet the central mass be not sufficiently impressed to otherwise respond to the irritation of the blood poison present. The recognition of this impairment of the vision as attendant upon, and as a symptom of albuminuria has been but very recently forced upon the attention of the profession.

Dr. Landouzy, Professor at the Medical School of Rheims, in France, in 1849, addressed a paper to the Academy of Sciences, wherein he asserts, as his conclusions: 1st. Amaurosis is almost constantly a symptom of albuminuria. 2d. This affection announces Bright's disease as an initiatory sign before the appearance of the other symptoms. 3d. It disappears and returns with the albumen in the urine. 4th. This amaurosis then forces us to consider albuminous nephritis as a result of an alteration of the ganglionic system of nerves.

Dr. Forget, of Strasburg, published immediately after some cases confirmatory of Dr. Landouzy's views. Our own countrymen, Drs. Hays and Pepper, of Philadelphia, have met with cases confirmatory of these views. In Dr. Hay's cases, a marked protrusion of the eye balls was also apparent.

Dr. W. H. Walshe,* relates a very interesting case of impairment of the vision in a male, aged 29 years, which eventually terminated fatally, where all attempts to account for the amaurotic condition failed, until at last the urine was examined, and found highly albuminous.

The sense of hearing is affected in Bright's disease about as frequently as that of vision. There was singing in the ears, and difficulty of hearing, in six of Bright's and Barlow's thirty-seven cases, and four of forty-one cases observed by Frerichs; thus the sense of hearing was affected in ten out of seventy-eight cases. †

Impairment of vision more or less complete, from the stages of amblyopia to amaurosis, is not unfrequently observed in the conditions of albuminous pregnancy, and if the other symptoms present were not severe enough to direct attention to the condition of the renal secretions, this should be sufficient to excite alarm, and direct us to an examination of the case to determine the presence and extent of the state of uræmia. The subsequent development of puerperal eclampsia, where such a condition has obtained, is among the very probable events to be looked for in the progress of the disease.

Dr. Finger narrates two cases of patients admitted into the hospital at Prague, with all the usual symptoms of cerebral disorder from retained urea, in which there was also a large quantity of albumen in the urine; and which, after death, nevertheless presented no appearance of granular kidney. In one there was slight puerperal peritonitis, and inflammation of the brain and its membranes, with two abscesses in the right hemisphere; in the other there were inflammation and purulent deposition in the urinary passages, with obstruction of one ureter and impediment to the function of the corresponding kidney, which was very much distended. Bright's disease had been diagnosed in both cases.

Dr. C. J. B. Williams‡ reports a fatal case of delirium tremens, where albuminous urine was present. Softening of the brain, and atrophy of the upper portion of the cervical medulla existed, whilst there was rather an absence of bloody spots in the brain, and the patient died from exhaustion.

The use, or abuse of certain articles of medicine, is followed by the development of albuminous urine, temporary in its character, subsiding as the system recovers from the impressions of the medicinal agencies.

* American Journal Medical Science, April, 1854, p. 519.

† British and Foreign Med. Chirurg. Review, April, 1852, p. 233.

‡ Braithwaite's Retrospect, No. XII, p. 107.

The excessive use of mercurials has been charged with the production of albuminuria. Its influence in this respect has been denied by some, but by others albumen has been distinctly asserted as being present where mercurials have long been employed, or salivation has followed upon its use.

Cantharides, when employed endermically for the purposes of vesication, have caused the development of albuminous urine. In these cases, albumen disappears after two or three days, with any or all other symptoms usually attributable to the use of this medicine, such as strangury, frequent desire to pass water, and the agitation following it. No dropsy follows in the train of these symptoms, and the integrity of the kidneys remains unimpaired. The evidence of the influence of cantharides in the production of this temporary albuminuria, rests upon the authority of observers both in England and France.

Dr. G. Owen Rees* has quite recently called the attention of the profession to a peculiarity in the urine of patients taking either copaiba or cubeba. The urine of such persons coagulates upon the addition of nitric acid, notwithstanding no albumen is present. The precipitate is dense and white, and greatly resembles albumen in appearance, and occurs immediately upon the addition of the test. This precipitate may be discriminated from that obtained from albuminous urine by nitric acid, by allowing the urine, to which the acid has been added, to remain at rest for an hour or two; when, should the precipitate consist of albumen, it will be found to have collected at the bottom of the tube, or to be arranged in flocculi through the liquor, the greater part of which will appear clear. If, however, the precipitate be caused by the presence of a vegetable matter derived from copaiba or cubeba, the precipitate does not subside for several days; not, indeed, till decomposition has occurred. Another and more speedy method of discriminating between these two impregnations and albumen, is by the use of the ferro-cyanuret of potassium as a precipitant, the urine being previously acidulated by acetic acid. If albumen now be present, it is immediately thrown down; but in the other cases, even if the acetic acid cause a slight turbidity, it is not increased by the addition of the ferro-cyanuret.

Dr. Rees remarks that these conditions do not always attend upon the use of copaiba or cubeba, appearing most frequently when the urine smells powerfully of the drug, and being scarcely perceptible when the characteristic balsamic order is wanting.

* On the Analysis of the Blood and Urine in Health and Disease. By G. Owen Rees, M. D., F. R. S., &c.

ART. IV.—*Abstract of the Clinical Lectures delivered at the Buffalo Hospital of the Sisters of Charity, upon the Diseases treated in the Male Medical Ward, by AUSTIN FLINT, M. D., Attending Physician, during the present College Session, viz., from October 14th, 1857, to February 27, 1858. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. IV. For January.

Paralysis; Hemiplegia; Paraplegia; Modifications of Sensibility; State of the Mind.

Paralysis may be defined to be abolition or diminution of motion in some part or parts of the body, usually accompanied with total loss or diminution of sensation.

There are several varieties of paralysis, too well known to claim description, such as hemiplegia and paraplegia. There may exist total loss of motion in the affected parts; but more frequently some degree of motion remains, forming what is called *partial* paralysis. When limited to a particular region of the body, it takes the name of *local* paralysis. Where sensation remains and motion is impaired or lost, the paralysis is *incomplete*.

The causes of this affection reside in the nervous system, either in the brain or in the spinal cord, or as in local palsy in the nervous trunks proceeding thereto. Paralysis is not strictly a disease *per se*, but a sequel or consequence of some morbid process. When a hemisphere of the brain is the seat of disease producing paralysis, hemiplegia is the result; this may be more or less extensive, according to the amount of injury the brain-substance has received. Paraplegia, on the other hand, is due to some disease or lesion of the spinal cord. Whilst local palsy, as just remarked, usually depends on some local cause interfering with the function of the nerve or nerves distributed to the part.

The diseases which generally occasion hemiplegia, are apoplexy, accompanied with hæmorrhage, and softening of some portion of the brain. In hemiplegia, the symptoms characterizing the affection, may not become known immediately, particularly if it succeed an attack of apoplexy. When the effects of compression due to the amount of hæmorrhage, have passed away, and the patient regains his consciousness, the loss of voluntary movement over more or less of one side of the body is rendered apparent.

It is interesting to observe the symptoms produced by a considerable amount of hæmorrhage into the brain-substance like that which commonly

takes place in apoplexy. We may state, very briefly, that the effused blood produces compression of the brain; this is shown by the comatose condition of the patient after such an attack. The hæmorrhage having ceased, the serum of the blood is absorbed, leaving behind the clot. The cause of compression being thereby almost removed, coma disappears, and the individual regains his consciousness to a greater or less degree; and paralysis is discovered to exist over more or less of one side of the body. But the clot of blood which remains in the substance of the brain, gives rise to a series of events very similar to those produced by any foreign body; although not precisely the same. It should be borne in mind that the clot may be almost entirely absorbed. And further, that its constituents are similar to those which exist in the neighboring structure. The clot then excites a certain amount of inflammation in the substance of the brain immediately surrounding it; and in this way, we account for that change which takes place in the condition of the patient, manifested by active delirium. The disease to all appearances, progresses favorably for a few days, when the patient is attacked with delirium manifested by incoherent talking, repeated attempts to get out of bed, accompanied with a flushed face and animated or excited countenance; the pulse, instead of being slow and feeble, becomes frequent, quick, and full; and the general aspect of the patient contrasts strongly with his recent lethargic or semi-conscious condition. After a time, these symptoms disappear according as the inflammation subsides.

It is unnecessary, however, for our present purpose, to pursue this interesting subject any farther. The patient having passed through this stage of the disease, slowly and partially regains his strength; and long after he is able to move the unaffected members of the body so as to rise from the bed, does he make the attempt. This disinclination to get out of bed, is a singular feature of many cases of hemiplegia, and doubtless may be due to the weakened condition of the mind which we are about to notice.

Hemiplegia does not always depend on a prior apoplectic attack for its production. It may be due to a tumor within the skull; or more frequently to softening of the brain. When it proceeds from these latter causes, it comes on slowly almost imperceptibly. This was well illustrated in the case of a patient now under treatment. He had been in bed several weeks, complaining of debility and of difficulty in moving the lower extremities sufficiently to enable him to rise from the bed. He then began to experience a sensation of coldness or numbness in both upper and lower extremities of the right side only; and on examination was found to be paralyzed on that side of the body. As there was no evidence of any cerebral hæmorrhage

in this case, the cause of the paralysis may probably be attributed to softening of the brain.

Paraplegia originating as it does from some injury to or disease of the spinal cord, does not involve, in the majority of cases, any disturbance of the great nervous centres. The patient sometimes being attacked suddenly, as occurred in one case from prolonged bathing in cold water, and in another case from a fall which fractured the humerus; and sometimes slowly as was the case in a patient under treatment some time since.

Aside from the loss of voluntary motion in the affected limbs, sensation may be changed in various modes. It is no uncommon event for the individual suffering from paralysis, to complain of distressing pains in the affected members. And still less infrequent is it to meet with cases of paralysis in which sensation is very materially impaired.

In persons of the latter class, various experiments may be made successively on the healthy and on the paralyzed extremities, to ascertain the amount of sensibility remaining. When the appreciation of pain is entirely wanting, the term *analgesia* has been applied to this condition.

But, besides alterations in sensation or in the cognizance of painful impressions in the affected part, another interesting feature is occasionally observed, namely, loss of *tactile sensibility*, or the common sensation of touch which has been regarded as one of the five senses. To this state, the term *anæsthesia* may properly be applied.

In cases of paralysis, we may then meet with those which present a diminution or loss of painful impressions or of sensation, called analgesia; the tactile sensibility remaining unimpaired. And with others in which there exists a loss of the sensibility to touch, whilst the capability of receiving painful impressions is very little, if at all impaired; these latter forming instances of anæsthesia.

To illustrate these conditions of sensation in paralysis, there are now three patients in the ward: two are affected with hemiplegia, and one with paraplegia. In both the former cases, the appreciation of painful impressions is much diminished; this is shown by piercing the skin with a pin, and carrying it to some depth before pain is experienced. But in both these patients the tactile sensibility is preserved; this is rendered evident by their ability to walk quite well with their eyes closed or their attention withdrawn. They are conscious when they touch the floor with the affected foot, or when they grasp any object with the affected hand; farther, they appreciate the impression made by gently touching the paralyzed parts, but are conscious of no pain when the same parts are severely pinched.

A French observer, M. Beau, was the first to point out these peculiarities of sensation, and deduced conclusions in favor of the opinion that there existed throughout the surface of the body, a special set of nerves constituting the sense of touch, just as is the case with the senses of smell, sight, hearing, and tasting. Farther observations in reference to these phenomena are desirable in order to decide upon the accuracy of his views.

A very common impression has prevailed in the minds of physicians, that hemiplegic patients, after the immediate effects of the apoplectic attack have passed away, do not usually regain their former mental condition. In other words, they often become imbecile or deficient in intellect. Peculiar circumstances recently occurred in the city of New York, directing the attention of the profession to this subject; and one of the physicians to Bellevue Hospital, Dr. Benj. W. McCready, has written a very elaborate article on the condition of the mental faculties after an attack of apoplexy followed by hemiplegia. This paper was published in the New York Journal of Medicine, Sept., 1857.

Dr. McC. draws his inferences respecting the state of the mind after the occurrence of these events, from collections of cases of apoplexy already reported. His deductions are, therefore, free from any preconceived opinions or from any tendency in favor of his views in the report of individual cases.

The result of his investigations goes to show, that the common impression of the profession is, in a great measure, incorrect. That the mental condition of those who have suffered from apoplexy and hemiplegia, is not very materially different from what it was prior to the attack. In Mr. Copeman's collection of cases of apoplexy, there are fifty cases, "in which the patient had recovered from the first effects produced by the apoplectic stroke;" twenty-four of the fifty cases, were followed by hemiplegia. Yet, "in no one of these cases," says Dr. McC., is "there the slightest indication that the patient was left with a mind, I will not say, reduced to a state of imbecility, but impaired in any marked degree."

Proceeding to higher authority, he then analyzes the cases contained in the *Clinique Médicale* of Andral, and in the *Anatomie Pathologique* of Cruveillier. They are sixteen in number, in which there existed hemiplegia due to an attack of apoplexy; these patients subsequently died of other diseases. But, in only two instances was there noticed any decided impairment of the mind. In many individuals, the subjects of the foregoing analyses, their customary avocations were resumed, and their mental faculties as freely and as severely exercised as antecedent to the apoplectic seizure.

The symptoms which are presented during the course of the disease, after

the comatose state has disappeared, and hemiplegia has been discovered, are such as to induce the friends or attendants to believe the patient imbecile, or even idiotic. And consequently, the hemiplegic has not unfrequently been consigned to the care of nature alone. And it is to be feared that the isolation and neglect to which these unfortunate persons are often subjected, has actually been productive of much of the imbecility or idiocy occasionally witnessed in such cases. "The mind rusts out for want of exercise!" The phenomena referrible to the faculties of the mind are well worthy the study of the physician. Dr. M'C. remarks upon this subject, that apoplectics, "comprehend well and judge correctly, but before their general health is confirmed, they can no more think continuously than they can take a long walk, or perform any other act demanding a considerable expenditure of nervous force." The memory, he adds, is "most apt to be impaired." In other cases, the faculty of speech is impaired or lost: the memory of words also may be lost, or words may be used improperly. In this paper, cases are adduced in which these phenomena occurred, and where the mind was not affected.

The following cases of hemiplegia were recorded prior to the discussion of this subject. They were under treatment in the medical ward of the Hospital for a considerable period of time: sufficiently long for any impairment of the mental faculties to have been recognized.

CASE I. Apoplexy; Right Hemiplegia; Loss of Memory of Words; Lately, Epileptiform Convulsions.

April 17th, 1856: Patrick Doherty, Irish, aged 40, laborer; admitted yesterday. No definite account of his previous history could be obtained, except that he had been affected with paralysis of the right side of the body.

He lies with his eyes open, notices what is going on around him, and his countenance does not denote a lack of intelligence. To all questions addressed, to him he invariably answers, "yes." This is the only word he speaks at any time. He even asks for nothing in the way of food or drink. But, when these are brought to him, he partakes of them. He makes a partially successful effort to protrude the tongue, when directed to do so. He makes motions for the attendants to furnish him with the vessel, and he uses it for his evacuations.

It is a matter of doubt, at this time, whether he is in a state of mental imbecility or not.

May 25th. Patient remains in about the same condition: he has improved in strength, however.

He never speaks except when questions are addressed to him, and then he uniformly answers, "yes." His countenance does not show any evidence of deficiency in intellect.

August 1st. Patient is able to walk with a little aid. He has scarcely any power over the right upper and lower extremities. When asked to protrude the tongue, he makes ineffectual efforts to do so. It is a difficult matter to determine how far the inability to talk proceeds from imbecility or from want of power over the muscles of the tongue and larynx. He still says nothing, except when questions are put to him: then he answers by the word, "yes." When the question demands a negative answer, he replies, "yes," and shakes his head. He evidently comprehends to a certain extent, the import of questions. And his aspect does not denote any impairment of intellect.

October 14th, 1857. This patient has been in the hospital since last record. He remained several weeks. He presented the same symptoms and the same mental condition as at last record. He entered the hospital again this fall; and now appears to be in much the same state of body and mind as when seen last, in April, 1857.

He is troubled with diarrhoea, and comes in to be treated for this. His aspect is bright. His countenance does not show any want of intelligence. He never speaks except when questions are put to him, and his only answer is, "yes." He comprehends the meaning of what is said to him. He beckons for food and drink, and for his other wants. He recognizes former friends in the hospital. He knows his wife, who comes at the interval of a week or more, to visit him. He attempts to speak, and makes ineffectual efforts to protrude the tongue, when directed. The amount of intelligence which he exhibits is as much as at any period since he has been under observation: he might be pronounced more intelligent. Nothing of interest occurred in this case until he left the hospital on the 30th of October, 1857, except, that during the month he had several convulsions, resembling an attack of epilepsy, by which he was very much prostrated. But he left the hospital very much in the same condition of body and mind as when observed on the 14th of the month.

CASE II. *Previous Apoplectic Attack doubtful; Left Hemiplegia; Partial Improvement; State of Mind twenty-two months after attack.*

May 20th, 1856. Ed. McGowan, Irish, aged about 54, laborer: admit-

ted last evening. The occurrence of apoplexy can not be ascertained, but is probable. He was suddenly attacked with paralysis of left side, on the 16th inst.

He was in a semi-comatose condition. He could be roused with some difficulty; and then he replies to questions, and makes efforts to move the limbs.

His mind is not active; but he tells his age; how long he has been sick, &c., &c.

He complained of pain in the right side of the head.

The sensibility appeared to be unimpaired.

From the 22d of May to the 6th of June, the patient exhibited the symptoms of that condition which have been supposed to be due to the inflammation excited by the presence of the clot in the brain, and which have been briefly adverted to above.

July 15th. This patient has improved very materially. He now sits up, and is able to walk a little. His general health is excellent. His mind is quite bright. He is full of Irish humor; and makes the ward merry with his jokes.

September 25th. Has acquired considerable power in the paralyzed limbs. Can walk out every day, and to some distance from the hospital.

He appears bright in intellect, and his mind is quite active. His humorous conversation is far above that expected in an individual in his condition of life.

February, 1858. This patient has been in the hospital since date of last record. He has been employed about the hospital; and has occasionally applied for relief for some transient symptom.

His mind is clear and active. He converses freely and intelligibly. His mental faculties are good. During a portion of the summer, he has occupied his time in the instruction of the little children in the hospital.

CASE III. Apoplexy; Left Hemiplegia; State of Mind two months after attack; Death by Asthenia.

July 11th, 1856. M. B., American, aged 43, miner: admitted on the 9th inst. Was attacked with apoplexy on the 7th inst. There existed paralysis of motion on the left side. Sensibility is not lost; but he experiences in the affected limbs the feeling of increase in bulk.

Passing over the numerous symptoms connected with the hemiplegia, we come to the state of the mind. His intellect is clear. He replies to ques-

tions intelligibly; but he manifests some forgetfulness of the circumstances attending his recent attack.

His knowledge of prior events appears to be excellent. He asks for what he desires, and converses intelligently.

He suffers very much from pain in the affected limbs.

From July 17th to August 9th, the patient exhibited those symptoms which are supposed to indicate inflammation of the brain substance surrounding the clot.

August 31st. Patient has exhibited a great disinclination to get up. He offered no resistance when the attendants proposed to assist him. And he has been up for a short time during the past two weeks.

September 17th. His mind is clear. He converses with those about him intelligibly. He makes known his wants to the attendants. He answers questions correctly. He is very weak, however; and instead of growing stronger, has become much weaker.

He died by asthenia at half-past ten P. M. Was conscious an hour before decease.

In regard to the treatment of these patients, it will be unnecessary to add any thing to the measures commonly adopted during the state immediately subsequent to the apoplectic attack.

If the patient survive the effects of the apoplexy itself, the helpless condition in which he is left by the paralysis of more or less of one side of the body, calls for our greatest care, and our most watchful attention. Hitherto, perhaps, we have regarded too exclusively the loss of physical power, and have directed most, if not all, our measures to the relief of the paralysis. But with the present knowledge of the mental condition of these truly unfortunate persons, much doubtless may be done to engage their attention, to call forth their mental faculties, and to exercise these gently at first; but sooner or later, to restore the mind to such an extent, that the person may be of much usefulness, if not really to regain his former strength of mind. At any rate, by this plan, we will not contribute to the isolation and neglect which such cases sometimes, perchance frequently, receive; and thereby avoid as far as lies in our power, the tendency to imbecility or idiocy, which is doubtless owing—in not a few instances—to the want of any exercise of the mind. Like as in a paralyzed limb, the muscles, for want of exercise, waste away, or become the seat of fatty substitution; so in the hemiplegic person, the brain, for a similar reason, may become atrophied or softened, or the seat of the same substitution.

ART. V.—*The Principles and Practice of Obstetrics, including the Treatment of Chronic Inflammation of the Uterus, considered as a frequent cause of Abortion.* By HENRY MILLER, Professor of Obstetrical Medicine in the Medical Department of the University of Louisville. With illustrations on wood. Philadelphia: Blanchard & Lea. 1858. 8vo., p.p. 624.

Several years ago, Prof. Miller prepared a work entitled *A theoretical and practical treatise on Human Parturition*. This work, as the author remarks, was *printed*, but not in reality *published*, for falling into the hands of a book concern which soon became embarrassed, no efforts were made to give it circulation. The edition was nearly exhausted by the demand among those who had been pupils of the author, and beyond this circle the work was but little known. In other respects than the circumstances connected with its publication, it was eminently successful. It was prized by those who had listened with pleasure and profit to the oral instructions of Prof. Miller in the University of Louisville; and by critical readers both at home and abroad, it was highly esteemed. It was noticed in flattering terms in the reviews of this country and in Europe. We had the gratification, as a countryman and friend of the author, to find it occupying a conspicuous place in the library of the most distinguished professor of obstetrics in Great Britain, and to hear from his lips a warm eulogium of its merits. The friends of the author have long urged him to prepare a new edition. Laborious professional duties, and a mental temperament satisfied with the possession of knowledge and skill, without that craving for wide distinction which often stimulates to bibliographical labor, had occasioned delay in engaging in the task, till it began to seem doubtful whether it would ever be entered upon. We confess that we were taken somewhat by surprise by the announcement that the undertaking had been accomplished. Thoroughly revised, much enlarged by the addition of new matter, and also improved by the introduction of illustrations, we have, at length, another edition under a new title. It is, in fact, essentially a new work, and is issued now by publishers who are abundantly able to do it justice.

We congratulate the author that the task is done. We congratulate him that he has given to the medical public a work which will secure for him a high and permanent position among the standard authorities on the principles and practice of obstetrics. Congratulations are not less due to the medical profession of this country, on the acquisition of a treatise embodying the results of the studies, reflections and experience of Prof. Miller. Few men,

if any, in this country, are more competent than he to write on this department of medicine. Engaged for thirty-five years in an extended practice of obstetrics, for many years a teacher of this branch of instruction in one of the largest of our institutions, a diligent student as well as a careful observer, an original and independent thinker, wedded to no hobbies, ever ready to consider without prejudice new views, and to adopt innovations if they are really improvements, and withal a clear, agreeable writer, a practical treatise from his pen could not fail to possess great value. With this rare combination of the varied excellencies so desirable in an author of a work on a province of the *ars medicinae* scarcely, if at all inferior in importance to either medicine proper or surgery, we need no other evidence that what he has written is deserving of diligent study on the part of the medical reader.

The work commences with a succinct but sufficiently full description of the pelvis and the sexual organs of the female. A chapter is then devoted to the clinical exploration of the female sexual organs. The consideration of pregnancy follows. The author then takes up the subject of abortion, and, next, the flooding of advanced pregnancy and incipient parturition. The remaining ten chapters are occupied with the various topics connected with labor.

We shall not undertake to review the work. Candor, indeed, obliges us to say that we have not, as yet, given it that thorough perusal which it claims. We have, however, examined it sufficiently to say that it bears the impress of the mental characteristics of the author. His conclusions are formed after mature deliberation, weighing well his own experience and according due weight to the opinions of others; but when deliberately formed, he does not hesitate to give them utterance, without regard to the authorities from whom he differs. The reader of the work who has not the advantage of a personal acquaintance with the author, cannot but rise from its perusal with the conviction that he has been made acquainted with the views of an honest, plain-spoken writer, who, with much learning and tact, combines the rare gift of good common sense.

Some of the doctrines advanced in this work are in strong contrast with those generally entertained. An instance of this kind relates to the necessity of manual delivery in all cases of unavoidable hæmorrhage. We are tempted to quote his remarks on this point contained in the preface. "It is very well known that in the latter part of the last century, the doctrine was peremptorily inculcated by Dr. Rigby that, in all cases of unavoidable flooding, i. e., flooding produced by the implantation of the placenta

over the os uteri, delivery by turning and bringing the child by the feet, so soon as it is practicable, is the sole resource of obstetrics, on the due performance of which the salvation of the patient depends. This doctrine has been generally received and acted upon until recently; but, at this time, there are plain indications of dissatisfaction with it, and milder methods of treatment have been proposed under particular circumstances. But I do not know that any writer has proposed the abnegation of the practice of Rigby, in all cases, and the substitution of less harsh and hazardous expedients. This I have ventured to do. I could, indeed, do no less, for I have never met with an instance of unavoidable flooding in which I deemed it imperatively necessary to deliver by turning. On the contrary, it has always appeared to me that to deliver by the feet, where the head of the child presents, is a high-handed measure, not only in flooding, but under any circumstances of parturition, and one which is much more likely to be productive of evil than good, either as to the mother or child. Accordingly, repugnance to this kind of delivery constitutes a leading and distinctive feature of this work, which may not be pleasing to those who find themselves on their dexterity in operative manœuvres, but which, nevertheless, I am persuaded is its highest recommendation."

The author has entered pretty fully into the consideration of inflammatory affections of the uterus and displacements of that organ. He offers as an apology for introducing these subjects in a treatise devoted mainly to obstetrics, his desire to embody in a permanent form the results of his observations on these important classes of the sexual maladies of females, inasmuch as he does not contemplate the publication of a separate work on the diseases of females. It was quite gratuitous to apologise for what every reader who properly appreciates the importance of these affections, will receive with gratitude. We know that Prof. Miller's experience in these classes of maladies is large—perhaps as large, if not larger, than that of any practitioner in this country. We sincerely hope that the success of his present work may induce him to favor the profession with a treatise on the diseases of females. Without undervaluing the able works of Prof. Meigs on this subject, (and we yield to no one in our estimation of the abilities of this distinguished author,) there is abundant scope in this direction for farther bibliographical labor. We could mention another eminent practitioner (with whom we have the pleasure to be associated,) whose excellent judgment and rich store of experience admirably fit him for the task of writing a work on female diseases, but we much fear that the unremitted importunities of his friends will prove ineffectual.

Returning to Prof. Miller's work, we have only to add that we hope most sincerely it will be in the hands of every reading and thinking practitioner of this country.

ART. VI.— *Report of Mortality in Buffalo for the month of Jan., 1858.*

By H. D. GARVIN, M. D., Health Physician.

DISEASES.	No.	Male.	Females.	No Sex given.
Albuminuria, ...	1	1		
Apoplexy, ...	2	2		
Asthma, ...	1	1		
Bronchitis, ...	1	1		
Cephalitis, ...	1	1		
Convulsions, ...	12	5	6	1
Croup, ...	3	3		
Cyanosis, ...	1		1	
Diarrhoea, ...	1		1	
Enteritis, ...	1	1		
Fever, Typhoid, ...	2	1	1	
" Scarlet, ...	2		2	
" Puerperal, ...	2		2	
Febris Nervosa, ...	1	1		
General Dropsy, ...	1		1	
Hepatitis, ...	2	1	1	
Hydrocephalus, ...	8	4	3	1
Hydrothorax, ...	1	1		
Hydrophobia, ...	1	1		
Influenza, ...	1		1	
Intemperance, ...	3	1	2	
Insanity, ...	1	1		
Marasmus, ...	2	1	1	
Metritis, ...	2		2	
Old Age, ...	5		4	1
Phthisis, ...	18	6	8	4
Pneumonia, ...	9	5	2	2
Premature Birth, ...	1	1		
Pharyngitis, ...	1	1		
Phlebitis, ...	1	1		
Quinzy, ...	2			
Rubeola, ...	3	1	1	1
Still-born, ...	7	2	2	3
Schirrhus of Stomach, ...	1	1		
Suicide, ...	1			
Tabes Mesenterica, ...	4	3	1	
Teething, ...	5	2	3	
Uterine Cancer, ...	2		2	
ACCIDENTAL DEATHS:				
Drowning, ...	4	3	1	
Scalding, ...	1		1	
Smothering, ...	1		1	
Total, ...	144	71	60	13

REGISTER OF MORTALITY—CONTINUED.

SEXES.

Males, ...	70
Females, ...	61
Sex not given, ...	13
Total, ...	144

AGES.

Still-born, ...	7	Between 20 years and 30 years, ...	13
1 day, ...	3	" 30 " " 40 " 	6
1 day and 30 days, ...	7	" 40 " " 50 " 	12
Between 1 month and 6 months, ...	21	" 50 " " 60 " 	4
" 6 months and 12 " 	9	" 60 " " 70 " 	2
" 1 year " 3 years, ...	26	" 70 " " 80 " 	6
" 3 " " 5 " 	5	" 80 " " 90 " 	1
" 5 " " 10 " 	3	" 90 " " 100 " 	0
" 10 " " 20 " 	6	" 100 " " 100 " 	0
.....	87		44
Ages not given, ...	13		131
Total, ...	144		144

NATIVITIES.

American, (white,)	69	Prussian, ...	1
" (colored,)	2	Swiss, ...	1
German, ...	27	French, ...	1
Irish, ...	19	Scotch, ...	0
English, ...	4	Poland, ...	0
Canadian, ...	0	Country not given, ...	10
.....			144
Total, ...	144		144

Poisoning by Twelve Drachms of Laudanum; Recovery.—Dr. G. C. Gibb records (*Lancet*, July 25, 1857,) a remarkable case in which twelve drachms of laudanum were swallowed, with a suicidal intent, by a gentleman seventy-two years of age, healthy and temperate, and not in the habit of using opium. No symptoms of poisoning occurred; the patient passed a restless, sleepless night, and nine hours after the laudanum was taken spontaneous vomiting occurred, and under careful treatment he entirely recovered.—*American Journal Med. Science.*

EDITORIAL DEPARTMENT.

The Supra-Renal Capsules.—Medical practitioners have always occasionally met with a disease affecting the color of the skin and accompanied by extreme emaciation, of the pathology of which they were utterly ignorant. We ourselves had an opportunity of seeing such a case in the wards of Prof. Flint, at the Buffalo Hospital of the Sisters of Charity. In this case, as far as our memory serves us, the patient was exceedingly emaciated; had cough and extensive pulmonary disease, and was affected with a brown discoloration of the skin, which was general, with the exception of spots over the body of dazzling whiteness, which were of irregular shape and varied in size from that of a sixpence to a dollar, or in a few places were even larger. The patient died a few days after his admission into the wards, but no autopsy was made.

A short time after this, we saw a notice of a monograph by Dr. Addison, on "*The supra-renal capsules and their connection with Bronzed Skin.*" Dr. Addison had made a number of post-mortem examinations of patients who were affected with this peculiar discoloration of the integument, which he denominated "*Bronzed Skin,*" and invariably found associated with it a disease or disorganization of the supra-renal capsules, by which their function was entirely abolished. As Addison was the first to point out any connection between bronzed skin and disease of these organs, it has been proposed that the disease shall be called "*Addison's Disease,*" as albuminuria connected with organic disease of the kidneys was named after its distinguished discoverer, Dr. Bright. Physiologists, as is well known, have never been able to determine definitely the function of the ductless glands or the blood glands, as they are sometimes called; which are the spleen, thynoid and thymus glands, mesenteric glands and the supra-renal capsules. These organs have all the anatomical characteristics of ordinary glands, with the

exception of ducts; and, as owing to this, their secretion, if they have any, cannot be subjected to analysis, their rôle in the economy has remained almost unknown. In none of these however, has the obscurity been so great as in the case of the supra-renal capsules. The brilliant experiments of Bernard in regard to the Glucogenic function of the liver, which so surprised and delighted the scientific world, and which made such an advance into the pathology of that hitherto unaccountable disease, diabetes mellitus; gave a new impulse to the study of the ductless or blood glands; as by these experiments Bernard had shown that the liver, in addition to its office as a bile secreting organ, formed sugar within its substance, which was given up immediately to the mass of blood without the intervention of an excretory duct: since this was discovered, it has been shown that the liver also produces fat *de novo*, though as much is not known about this function as about the production of sugar. Thus the liver, in addition to being an ordinary gland, possessed of an excretory duct, is in reality a blood gland like the spleen, or supra-renal capsules.

A great proportion of the energy of the investigations into the functions of the ductless glands has been directed towards the spleen, and it is now supposed, and on pretty good foundation, that the spleen and mesenteric glands have an important office in the formation of blood globules. The physiology of the supra-renal capsules however, had still remained buried in its original obscurity.

Upon the appearance of the excellent monograph by Dr. Addison, observers in all parts of the world set themselves to work upon the physiology of the supra-renal capsules; the paper of Addison having thrown some light on the subject, and seeming indeed to establish some connexion between these organs and the formation of pigment, or the regulation of its deposition. The Physiologists who have made known to the world the results of their experiments, are Gratiolet, Brown Séquard, Philipeaux, and Dr. Harley, of University College, London. The experiments of these gentlemen, whose names our readers will recognise as belonging to men eminent in this department, have led them to somewhat different results: we had the pleasure of listening to lectures by Dr. Brown Séquard on this subject a year ago, when he seemed to prove that the supra renal capsules were essential in the highest degree to life, even more so than the kidneys themselves; as an animal survived for two or three days after the extirpation of the kidneys, but it lived for a few hours only after the removal of the supra-renal capsules. Brown Séquard also showed that animals from whom these organs had been removed, were convulsed and affected with that peculiar

nervous phenomenon which is known as "turning," this turning always being in the same direction. He also asserts that death supervenes too rapidly to be due to inflammation of the peritoneum, and indeed, on examining this membrane after death, no evidences of inflammation are observed. Brown Séquard performed experiments in the presence of his audience, and we had an opportunity of witnessing the phenomena which he described.

The most elaborate and satisfactory paper on this subject which we have yet seen, is from the pen of Dr. Harley, and appeared in the last number of the British and Foreign Medico-Chirurgical Review. This article we have carefully perused, and it was this which led us to make the preceding observations. Thinking this subject to be of great importance to us as Physiologists and Pathologists, we have been thus extended in our remarks, and will give a brief recapitulation of the more important results at which Dr. Harley has arrived; this we deem the more appropriate, as it is probable that many of our readers do not have an opportunity of seeing the above mentioned periodical.

In anatomical structure, these organs present no very striking points of difference from some of the ordinary secreting glands of the economy; they are formed of a medullary and cortical substance like the kidneys. There is a peculiarity however in their chemical constitution. "In the beginning of the last year, M. Vulpian communicated to the *Société de Biologie* the discovery of a very peculiar reaction possessed by the supra-renal capsules of vertebrated animals. He found that an aqueous solution of iodine brought in contact with the medullary substance gave rise to a beautiful rose color. And further, that the greater portion of oxidizing agents acted like the iodine solution, although in a minor degree. Even the oxygen of the air, under the influence of light, produced the same effect. I have repeated M. Vulpian's experiment on the medullary substance of the supra-renal capsules of sheep with success; but am equally at a loss with the author to form an opinion as to the nature of the substance which possesses the strange property alluded to. We as yet know so little regarding the nature of color and coloring matter, that it would be futile to attempt to draw any conclusions with regard to the import of the rose colored reaction above spoken of."

"Not being able to separate the coloring matter, M. Vulpian, in concert with M. Cloez, proceeded to extract the "immediate principles" of the supra-renal bodies; and these gentlemen have recently communicated to the *Institut de France* as the result of their united labors, the discovery of hippuric and taurocholic acids in the supra-renal capsules of herbivorous ani-

mals. But as these substances have been abundantly found in different parts of the animal body, their discovery in the latter organs, although interesting, unfortunately throws no light upon the nature of their functions."

Dr. Harley has since seen a communication from Prof. Virchow, in which he confirms the observation of M. Vulpian with regard to the rose colored reaction, and also mentions that he has found senecine in the medullary substance.

The question arises whether the supra-renal capsules are organs peculiarly essential to foetal existence and development. It was formerly supposed that this was the case, and the arguments in favor of this idea, were the great relative size of these bodies in the foetus, and their small size in adults. Meckel states that at the third month, the supra-renal capsules and kidneys are of equal size, at the sixth month as 2 to 5, at birth as 1 to 8, and in adult life as 1 to 28. Later observations however, by the author, Brown Séquard, and others, show a different result in the case of some of the mammalia. Dr. Harley has been confined in his observations to the cat, having examined thirteen foetal and six adult capsules. Without giving the figures and calculations, we will give the results at which Dr. Harley has arrived and in which he confirms Ecker, Frey, and others: "The weight of the supra-renal capsule in the kitten at birth is to that of the kidney as 1 to 57.3; and in the adult as 1 to 54.8. But as so few adult capsules and kidneys were employed, it may be perhaps better to take the average of the whole six that were examined, which would then give us the relative weight of three organs in the full grown animal as 1 to 46.49.

"We shall find by a very simple calculation that the kidney was after birth increased 12.35 times in weight, while the supra-renal capsule at the same time has increased 14.87 times in weight. What conclusion are we to draw from this fact? We here see that the supra-renal capsules increase in size, as age advances, at a greater rate than the kidneys. I must here speak with caution however. Small statistics are dangerous data to draw conclusions from, and perhaps a larger number of observations might furnish us with different results."

Thus our readers will see that Ecker, Frey, and Brown Séquard, whose observations are here confirmed by Harley, have developed an exceedingly important fact in relation to the probable comparative activity of the function of the supra-renal capsule, whatever it may be, in foetal and adult life: correcting the doctrines promulgated by Meckel, that these organs in the mammalia diminish after birth, both in relative size and activity of function.

We now come to experiments, bearing directly on the function of the

supra-renal capsules. The first experiment was on an adult cat, from which the right capsule was removed. The animal survived nine days after the operation, and on post mortem examination, no cause of death could be discovered.

Another experiment was made on a white cat, from which the capsules were removed. This died in twenty-four hours, and on examination there were found all the indications of peritonitis.

Another experiment was made on a small white coach dog, from which the left capsule was removed. It died on the twelfth day, and on examination, signs of peritonitis were discovered.

An experiment was then made on two Guinea pigs, in one of which the abdomen was opened, and the amount of injury which the parts would suffer by the removal of the supra-renal capsules, was inflicted, the wound sewed up, and the capsules allowed to remain; the fellow, which was of the same age, sex, and development, was then deprived of the capsule on the corresponding side. Both these animals died within twenty-four hours after the operation. The same experiment was then repeated on two cats. The cat from which the supra-renal capsule (the right,) was removed, lived two days; the other died during the third night. In the abdomens of both, signs of peritonitis were distinctly visible.

The next experiment was made on a bull terrier dog, by removing one of the capsules without applying a ligature to the vessels, the body being eunucleated with the fingers. The dog remained in the author's possession for five months, and did not suffer from a day's illness.

The next experiment was one of exceeding interest: it was on a large tom cat, in which, on opening the abdomen, the right capsule was rough and hard as a stone: it was eunucleated with the greatest facility. The same operation was repeated on the other side with a similar result. On making a section of the capsules, it was found that a considerable portion of the medullary, as well as of the cortical substance, had become replaced by a calcareous deposit, consisting chiefly of carbonate of lime. The remaining portions of the gland contained so much fibrous tissue, that the normal structure might be said to have entirely disappeared. As the operation on this animal had been performed with the utmost facility, and there had been no hæmorrhage, or any apparent injury done to the surrounding parts, except the tearing through the vessels and nerves, the author felt sanguine of success. His astonishment was great therefore when, arriving at the college next morning, he found the cat dead. The post mortem examination revealed nothing, though the blood was searched for signs of phlebitis, ex-

amined for crystals, and for the flakes of pigment described by Brown Séquard. As it has been found by Ludwig and Haffer, that section of the splanchnic nerves will kill animals in one or two days, and according to Brown Séquard, mere pricking or cutting of the semi-lunar ganglion proves fatal to rabbits in thirty hours, while division of the sympathetic in the neighborhood of the kidneys causes death in twenty-three hours: in absence of other proof of death, it is probable that it resulted from injury done, in tearing out the capsules, to the ganglionic system of nerves.

The extirpation of the right is more fatal than the removal of the left capsule, as is proved by experiments which the author has cited, but which it is unnecessary for us to state. M. Gratiolet thought that this fact was to be explained by the proximity of the liver, and the occurrence of hepatitis; at first Dr. Harley was of this opinion, but he now very justly concludes that it is due to another cause. The right semi-lunar ganglion, which is much larger than the left, lies (in the dog and cat,) directly beneath the supra-renal capsule; while the smaller left semi-lunar ganglion is placed on the left crus of the diaphragm, and internal to the supra-renal body. Thus it will be immediately seen that a removal of the right capsule will do more mischief to this ganglion, and this injury has been shown by Ludwig, Haffer and Brown Séquard to be sufficient to produce death in a short time.

As it is generally the case in the removal of double organs, that if one be left it becomes hypertrophied from being compelled to perform a double function. Dr. Harley was anxious to observe if this was the case as respects the supra-renal capsules. He accordingly removed the right capsule from a cat, which had made an excellent recovery from the operation of removing the left about a month before. Nothing unusual, however, was observed: on the morning of the third day it died, and on opening the abdomen, two of the lumbar lymphatic glands were observed very much enlarged, and presenting a peculiarly beautiful, semi-transparent, lobular appearance.

Dr. Harley performed another experiment on a piebald rat, with reference to the same point. The right supra-renal capsule was removed, and the animal made a rapid recovery, being in excellent condition at the end of six weeks. The left capsule was then removed, and compared with others taken from animals of the same species and age, in order to ascertain if it had become hypertrophied. But in this, as in the case of the cat, there was no very marked difference in either its size or appearance. From the effects of the latter operation the animal speedily recovered, and ultimately became very fat and healthy looking.

An experiment was made on a white rat, in order to observe if any change

would take place in the color of the hair and skin. Both capsules were removed at an interval of nine days. The animal lived sixteen days after the last operation, and during that time the color of the hair and skin was carefully watched, without discovering any alteration, excepting that the neck became denuded of hair, was covered with a luxuriant crop of young hair, about an eighth of an inch long.

The foregoing experiments, which we have presented in as condensed a form as was consistent, cannot fail to strike every one as extremely interesting, and leading to some very important conclusions. Brown Séquard has maintained that it is impossible for an animal to live for more than forty-eight hours at the farthest, after it has been deprived of its supra-renal capsules. The experiments of Dr. Harley fully controvert this statement, and in addition, M. Philipeaux, of Paris, has removed the spleen, supra-renal capsules, and the thyroid body from the same animal, which afterwards recovered. Dr. Harley brought with him from Paris a young rat, the offspring of a mother which had been deprived of spleen and supra-renal capsules. Brown Séquard is also probably in the wrong in supposing that the convulsions and turning which followed his experiments, were due to the removal of the supra-renal capsules; as Dr. Harley has not observed it in his experiments, and is confirmed by a private letter from Professor Virchow, who has also failed to notice this phenomenon.

We had the pleasure, from the politeness of Dr. Brown Séquard, of examining certain microscopic crystals, which he invariably found in the blood of animals from which he had removed the supra-renal capsules. These crystals were unlike the ordinary blood crystals, being pale and needle shaped. Dr. Harley makes no allusion to this occurrence.

The article, of which we have given a *résumé*, is not yet concluded, but will be continued in the next number of the British and Foreign Review: it seemed, however, to have treated of certain points with sufficient completeness to make an analysis of it, even now, profitable to our readers; when it is concluded, we will continue our analysis in another number of the Journal. We ourselves had an opportunity of seeing a case, which was probably an example of Addison's disease, before we knew of Addison's monograph; and though they are extremely rare, yet they are liable to occur in the practice of any one; we would earnestly request, that if any of our readers should meet with such a case, that they will send us its history, and if fatal, a minute account of the appearances of the supra-renal capsules. It is in this way only that we can make progress in understanding this new disease, as it is not likely that a sufficient number of cases will come under the observation of a single individual for purposes of analysis.

Finally, we present the conclusions drawn by Dr. Harley from the results of his experiments.

- 1st. *The supra-renal capsules are not solely fatal organs.*
- 2d. *The supra-renal capsules are not absolutely essential to life.*
- 3d. *The removal of the right is generally more fatal than removal of the left capsule.*
- 4th. *That convulsions do not necessarily follow the removal of the capsule.*
- 5th. *That the absence of this function (in rats,) is attended neither by great emaciation nor debility.*
- 6th. *That when death follows upon the extirpation of the supra-renal bodies, it is in most cases in consequence of the injury done to the neighboring tissues; perhaps most frequently the mutilation of the ganglionic system of nerves.*
- 7th. *Absence of the function of the supra-renal bodies is not proved to have any special effect in arresting the transformation of hæmatin, or in increasing the formation of blood crystals.*
- 8th. *The suppression of the supra-renal capsular function is not attended by any increased deposit of pigment in the skin in its appendages (in rats.)*
- 9th. *The problem of the connection of bronzed skin and supra-renal capsular disease is more likely to be solved in the dead house than in the physiological laboratory.*

R.

Annual Meeting of the Medical Society of the County of Erie.—The annual meeting of this society, was held in this city, on Tuesday, Jan. 12th, ult., at the Rooms of the Buffalo Medical Association, No. 7 South Division street. It was one of the largest, if not the largest, gathering of the members ever assembled. A goodly number of members were in from the country, and besides a number from neighboring counties were present by invitation.

The President, Prof. F. H. Hamilton, presided. The business of the session was commenced by the reading of the minutes of the last meeting by the secretary, Dr. James M. Newman.

The business of the day was limited entirely to the transactions of the ordinary business of the society: and no exciting questions were proposed, or discussed.

The usual annual report, was received from the Librarian, Dr. Samo. An appropriation for the re-imbursement of the Library was recommended.

The Treasurer, Dr. Newman, reported

The receipts for the year, ...	\$69 75
Expenditures (including fifty-two dollars law expenses), ...	84 00
Expenditures over receipts, ...	\$14 25

The committee appointed at the special meeting, Nov. 22d, 1856, to employ counsel in behalf of the society to defend it in the suit brought by Dr. J. D. Hill,

Reported, That they had employed Messrs. Talcott & Thompson in the case, and that the cause had been argued before the Supreme Court, Judge Marvin, presiding; and that the society had been beaten, and a peremptory mandamus had been issued compelling the society to reinstate Dr. Hill into all his privileges as a member of the society.

That the expenses attending the defense of the said suit had been fifty-two dollars.

A resolution was accordingly passed, restoring Dr. Hill to "to whatever and all the standing, right and privileges he had enjoyed in this society previous to the passage of the aforesaid resolution of expulsion."

The committee also reported, that an alternative mandamus had been sued out by Dr. E. P. Gray against the society, and as the points in the suit of Dr. Gray had been discussed and considered in the decision rendered in the case of Dr. Hill, and as the opinion of the court had been pronounced adversely to the society, they had not deemed it advisable, or of any avail to take steps to defend the society in the suit of Dr. Gray

A resolution of similar import to that of Dr. Hill, was then passed by the society in reference to Dr. Gray.

The annual Oration was then delivered by the secretary, Dr. James M. Newman: subject, "*Albuminuria, Independent of Organic Disease of the Kidneys.*" The paper will be found in another portion of this Journal.

Dr. J. S. Hawley, was appointed *Orator* for the semi-annual meeting, and Dr. B. H. Lemon, his substitute.

After the transaction of some business having reference merely to the duties and wants of the day, but of not sufficient public interest to report, the society proceeded to the annual election of officers, and made choice of the following gentlemen to fill the respective offices:

Dr. Austin Flint,	.	.	.	.	President.
" L. P. Dayton,	.	.	.	.	Vice-president.
" James M. Newman,	.	.	.	.	Secretary.
" John Root,	.	.	.	.	Treasurer.
" J. B. Samo,	:	.	.	.	Librarian.

Primary Board.—Dr. Sanford Eastman, J. S. Hawley, and J. Hauenstein.

Censors.—Dr. B. H. Lemon, Exam. in Anat. Physiology and Surgery.
 " W. Gould, " " Pract. Med. and Obstetrics.
 " C. B. Hutchins, " " Chemistry and Pharmacy.
 " C. C. F. Gay, " " Mat. Med. and Botany.
 " L. J. Ham, " " Med. Jurisp. and Pathology.

Delegates to the State Medical Society.—Drs. C. H. Wilcox, John Boardman, P. H. Strong, and Wm. Van Pelt.

The President and Secretary were authorized to appoint Delegates to the American Medical Association.

The President, Prof. Hamilton, then delivered his *Valedictory Address*.

At its conclusion, a vote of thanks was tendered the speaker.

The business of the day being concluded, the society adjourned.

The members, however, shortly after convened again, at the American Hotel, where in one of the parlors, a session of some four hours was held in discussing the good things spread upon the table of the host, Mr. Hodges, and in the interchange of sentiments appropriate to the occasion. The season of convivial enjoyment furnished a fitting close to the duties of the day; and were such occasions more frequent among the members of our profession, many of the asperities of feeling, and petty jealousies and heart burnings which too often mar the pleasures of professional intercourse would be wiped out and forgotten.

K.

The Secretary and Excito-secretory System. By H. F. CAMPBELL.

In our notice of the Transactions of the American Medical Association, we took pleasure in referring as fully as possible, to the excellent papers of Dr. Campbell. These have been collected by the author and elegantly bound in muslin, for a copy of which we tender him our thanks.

R.

Death of Morgan G. Lewis, M. D.—In the present Journal we give the minutes of the annual meeting of the Erie Co. Medical Society, held in January last. Among those who were present upon that occasion, was Dr. M. G. Lewis, of Black Rock, who was in apparent health at the time, and with every prospect, as far as human eye could discover, of mingling with many successive anniversaries of the society.

But although so short a time has elapsed, Dr. Lewis has paid the debt of nature, and he now sleeps the sleep which knows no awakening this side of the resurrection morn.

Dr. Morgan G. Lewis died at his residence in Black Rock, on Monday, the 8th of February. The announcement will cause an emotion of sorrow in all who knew his worth as a physician and a citizen, and a deeper feeling in those who were intimately connected with him in the social circle. His worth demands at our hands some notice.

Born in Buffalo on the 15th of January, 1813, Dr. Lewis grew up, lived and died in his native place. As he approached the verge of manhood, he studied the profession of medicine with the venerable Moses Bristol. After completing his education at medical institutions in Ohio and Philadelphia, he commenced the practice of medicine at Black Rock, in the spring of 1836, and at the same time assumed the editorship of the *Black Rock Advocate*, a paper then published under the auspices of Gen. Porter, and designed to advance the interests of that place against the village of Buffalo. When the rapid growth of the embryo city made it evident that this contest was a vain one, Gen. Porter removed to Niagara Falls, and for some time after that removal Dr. Lewis edited both the *Advocate* and the *Niagara Falls Journal*, still attending, however, to his practice of medicine. Finally abandoning the editorial chair, he devoted himself entirely to his profession, and continued in practice up to the time of his death. He never forgot his interest in public matters, and was always a warm advocate of any plan to advance the interests of the community in which he lived.

It is as a physician only that we, like most others, have known Dr. Lewis. as a practitioner he was a sensible, practical and successful man. In all the associated enterprises of the profession he was in the advance. Always a devoted member of the Erie County Medical Society, he was ready to sacrifice his own personal interests to what he saw was required by the dignity of the society, and did so on more than one occasion with a quiet modesty which endeared him to his colleagues. He never placed money before his

duty to his profession, and twice within our knowledge has refused offices which he thought inconsistent with the dignity of a physician.

When any individual cherishes this high sense of honor in his intercourse among his fellows, we may look to him as a man of generous and charitable impulses. No other evidence is needed of the possession of these qualities by Dr. Lewis, than the universal grief among the poor of Black Rock which followed his death. On Monday the door of his house was beset by many poor women who came with anxious inquiries and went away with tears for the loss of a kind and helpful friend.

Dr. Lewis was married about three years since. A little child, the only fruit of this union, died about two weeks since, and Mrs. L. is left doubly bereaved. As the hour of death approached, Dr. Lewis recognized its coming, and with the courage of a true and consistent christian, gave verbal directions for the arrangement of his funeral, and the disposition of his affairs. Even the possible desire of his physicians for an autopsy was anticipated, and a wish expressed that should be such a measure deemed useful it should be permitted.

For the purpose of paying a proper tribute of respect to the memory of the deceased, on the evening of Wednesday, Feb. 10th, a meeting of the Medical Society of the county of Erie, was held at the rooms of the Buffalo Medical Association, Prof. Austin Flint, president, in the chair, and James M. Newman, secretary. The meeting was largely attended.

The president announced the object of the meeting.

Prof. James P. White announced the death of Dr. Morgan G. Lewis. He said that he rose to express his own regret, and to ask that a committee of three be appointed to draft resolutions expressive of the feelings of the society. Dr. White paid an earnest tribute to the singular purity of the moral and professional character of Dr. Lewis, and to his excellence as a physician.

Dr. Phineas H. Strong seconded the motion in a few remarks bearing on the consistent and amiable character of Dr. Lewis.

Prof. Thomas F. Rochester spoke with feeling of the circumstances attending the final illness of Dr. Lewis, and the enduring love of his profession, which continued to his latest hour.

The president then appointed Drs. Rochester, White and Wilcox, as the committee to report resolutions.

Dr. Rochester, from the committee, reported as follows:

Resolved, Inasmuch as it has pleased Almighty God to remove from us our friend and associate, Dr. Morgan G. Lewis, as fellow citizens and

members of the Erie County Medical Society, we mourn the loss of a companion endeared to us by professional and private worth of the most enviable character. A native of Buffalo, and a practitioner in its immediate vicinity for more than twenty years, he was universally respected and esteemed by all who knew him. Quiet and retiring in his manners, entire kindness and reliability were not less characteristic than modest demeanor;—a beloved physician, cherished friend, excellent citizen, and humble and devoted Christian, his death is no ordinary bereavement.

Resolved, That we tender our respectful sympathy to his widow, to his aged mother, and to his other relations.

Resolved, That we will attend his funeral in a body, and wear the usual badge of mourning.

Resolved, That the foregoing resolutions be sent to his family, and published in the Buffalo Medical Journal and daily papers of this city.

In accordance with a wish expressed by the family of the deceased, Drs. Flint, Rochester, Hamilton, Strong, Wilcox and L. P. Dayton, were appointed pall-bearers

The society then adjourned.

A meeting of the Buffalo Medical Association had been appointed for this evening, but it was adjourned out of respect for the deceased, as he had been always a firm and warm member and friend of the same, although but seldom able to attend its meetings, owing to the distance of his residence.

N.

Materia Medica and Therapeutics, etc. By THOMAS D. MITCHELL, A. M., M. D., Professor in the Jefferson Medical College, etc. Philadelphia: J. B. Lippincott & Co. 1857.

This is the second edition of a work which was issued from the same house in 1850, having been revised and somewhat enlarged, to bring it up to the present state of the subject. It has very justly been thought by most reviewers, that the value of this work as a text-book, was very materially impaired by the classification, or rather arrangement of the articles of the *Materia Medica* in alphabetical order. The same plan is carried out in the present edition. Dr. Mitchell has lately been appointed to the Chair of *Materia Medica*, in the Jefferson Medical College, which was made vacant by the resignation of Prof. Huston; the position of the author, as professor of this branch of the largest medical school in America, and indeed, in the world, as well as the merits of the work, commend it to the favorable consideration of the profession.

F.

The sale of Poisons.—We extract the following from the Boston Medical Journal, and hope indeed that it may have some effect in remedying this great evil, under which we now labor. It is now as easy for a person to go into a drug store and buy a dime's worth of laudanum as it is to buy a loaf of bread. The small profits which druggists obtain from such persons, should not be sufficient to make them forget that when they sell poison without the order of a physician, they are violating the moral law, if not the law of the land. It seems to us, that if instead of making an impossible law against the vending of intoxicating beverages, the legislature had taken up the subject of the unauthorized selling of poisons, it would have provoked less ridicule and produced more benefit: F.

We have more than once called attention to the importance of a law regulating the sale of poisons to irresponsible persons, and we hope that the present legislature may deem it worth while at least to inquire into the expediency of some such measure, with a view of preventing suicide and murder, which crimes are really now committed with ease, since any person may procure laudanum, arsenic, or any other active poison, simply by paying for it. The subject was again forced on our notice a few days since, by a case in which a young woman nearly accomplished her purpose of self-destruction, through the inconsiderateness of an apothecary, who sold her half an ounce of laudanum, without the slightest hesitation. Fortunately the patient had taken a full meal before swallowing the laudanum, and as medical assistance was at once obtained, her life was saved, though with difficulty, as it was only by threats that she could be induced to take the repeated emetics which were necessary to evacuate the stomach.

We need a law which renders the purchase of active poisons for criminal purposes more difficult than it now is. They ought never to be sold at retail without a prescription from a physician. At least they ought never to be sold to a person applying alone: he should be required to be accompanied by a friend knowing the nature and effects of the article purchased, and a registry should be kept containing the names of the purchaser and witness, the date, the name and quantity of the drug sold, with the alleged purpose for which it is to be used.

It is one of the inconveniences of our form of government that it is difficult to enact laws for the preservation of human life, or to execute them when enacted. It is thought that we have a right to commit murder or suicide, provided we choose to abide by the consequences; to prevent the sale of poisons or other means of destruction is considered as infringing on the liberty of the subject. In older countries the case is different; in France or England poison cannot be bought at retail except under restrictions similar to those we have named above. But while we are waiting till experience shall make us wiser, would it not be worth while for the apothecaries to take the matter into their own hands, and refuse to sell active medicines without a physician's prescription, or at least without requiring the presence of a witness to the sale? We do not see how they could lose anything by adopting this precaution, except the few cents they would gladly forfeit to

prevent a crime; on the contrary, they would gain the esteem of the community, and would, we have no doubt, find an increased amount of patronage. We believe that these means, or similar ones, are adopted by some of our best apothecaries; humanity demands that they should be adopted by all.

The Sydenham Society.—We referred in our last number to the rumored demise of the Sydenham Society, and the project which had been entered upon of forming a new society. We now present from the Boston Journal the latest news in regard to this institution, in which we all have so much interest. It will be seen by the following article, that the author's information comes from the most reliable source: F.

We lately referred to the affairs of this Society, and expressed the hope that the benefits accruing from it, or from a similar organization, would be still continued to the profession. Conversation with the "Local Secretary" here, Dr. Salter, has put us in possession of the facts relative to its present condition and future prospects; and it is nearly certain that not only will the Society be maintained, but that its usefulness will be decidedly increased. The leading British medical journals have something to the same effect in their late issues, and there seems to be a wish to sustain a well-managed association of this kind. To our mind, most of the books which have been published under the old and now defunct administration are valuable, and well deserve a place in all medical libraries. Surely the works of Hippocrates, Sydenham, Harvey, Hewson, Louis, Simon, Wedl, Rokitsansky, Kölliker, Romberg, Prochaska, Dupuytren, Velpeau, Kuchenmeister, and others of the list, are such as no medical man would willingly be without. On the whole, we think the Society has been successful and judicious; if it be true that more practical works are *now* desirable, it is no less so that those already presented to the members have a great and permanent value, and that it would be a matter for regret had they not been furnished. Even the *Lancet*, which has shown a somewhat bitter feeling toward the Sydenham Society from the very first, hardly becoming a journal of so high a tone, whatever be the motives actuating the demonstration, has lately very properly insisted upon the advantages to be derived by medical students and practitioners from a study of the older authors, and has named, amongst such, several of the writings supplied by the Society of which it has professed to think so slightly. It were indeed well did the members of our profession, and especially the younger men, oftener turn the leaves of those rare old works which "young Physic" is too apt to term musty and dry. Instead of merely skimming the surface of the periodical literature of our art, and trusting solely to Braithwaite and Ranking, let them oftener ponder the Fathers of Medicine; it will be a more lasting "*retrospect*," and they will derive from them a more effective "*abstract*." Let us not be understood as under rating the above named valuable collections of medical facts and opin-

ions; there is no need to neglect *them*, but a place may be fitly given to the others. No reader, and especially no student, can rise unimproved from a perusal of Sydenham; and we do not believe the most progressive practitioner would be injured by a peep into the volumes of old Paul of Ægina, nor could it harm him to read the remarkable account of the Epidemics of the Middle Ages, by Hecker—for issuing the last work the Sydenham Society has been sneeringly censured. We say then, that whilst such a society should see that the majority of its publications are those which may wholly advance our *practical* knowledge, a sprinkling of such as are more general is highly appropriate. Especially might some which are historical of medical science be wisely chosen. We do not believe that one student—scarcely one practitioner—out of every hundred, knows anything about the *history* of the profession he has adopted; and the same is true for the proportion of them who know anything of the valuable old writings, some of which we have enumerated.

The British and Foreign Medico-Chirurgical Review, for January, 1858, speaks as follows in relation to the Sydenham Society. "That the late Society has conferred a great boon upon the profession of this country, there can, we think, scarcely be a doubt; and while it is very possible that the time had arrived at which its regeneration was desirable, and at which it became necessary that such an association should be guided by somewhat different principles from those upon which the council have hitherto proceeded, we are equally confident that the class of literature which has been rendered accessible to the profession of this country by the agency of the old Sydenham Society, has tended much to elevate the scientific status of its members."

After stating that the old Society often contemplated publishing "more modern and more strictly practical works," than the majority of theirs were, the Review expresses the hope that the difficulties which prevented the execution of such intentions, may be overcome by the new Sydenham Society. A number of gentlemen, it appears, have already met for the purpose of re-constituting themselves into such a Society, and a Prospectus has been offered, designatory of their plan, from which we quote the titles of a few of the volumes proposed: "Marx's 'Life of Paracelsus,' translated from the German; Hebra's work on Diseases of the Skin, with atlas of plates, &c.; Gooch 'On the More Important Diseases of Women;' Pirogoff's 'Surgical Essays;' 'Diday on Hereditary Syphilis,' with annotations; a collection of facts upon Bronzed Skin and Diseases of the Supra-Renal Capsules; Dieffenbach's 'Operative Surgery,' with annotations; Heberden's 'Commentaries;' 'The Father's of British Surgery,' being selections from the works of Wiseman and others; 'Modern Military Surgery,' &c., &c."

This list promises well, and we cannot but hope that when the new organization is effected, not only all the old subscribers will remain, but a legion of new ones be added; and we would earnestly advise those who have hitherto been members in the United States, to adhere to their membership; and those who have not, to keep their eyes open for the moment when the new books shall appear, and remember the wisdom of speaking for everything desirable, *in season*. With the Review from which we have extracted the above paragraphs, we cry, "*Le Roi est mort, vive le Roi!*"

New Stand for the Compound Microscope. By O. W. HOLMES, M. D.

A late number of the Boston Medical Journal contains an account of a new stand for the compound microscope, accompanied by an illustration. We are not familiar with the use of the microscope for any other than anatomical and pathological purposes, and as Dr. Holmes, in addition to his proficiency in this department of microscopic science, is an adept in other matters pertaining to botany, etc., we are hardly able to judge of the extent to which this invention will be useful.

The main object of the invention is to enable the observer to throw direct light upon an object from a lamp under the stage. To accomplish this end the stage is made in the form of a horse-shoe, and the lamp is adjusted by means of some simple and ingenious contrivances which it is unnecessary to describe. Though the invention of Dr. Holmes shows great ingenuity, and accomplishes the ends for which it is intended, we ourselves are unable to see that it will present any practical advantages in anatomical and pathological investigations. According to the experience of the best authorities, the light of day reflected from the sky or a white cloud is the best and purest form of illumination, and next to this is the light of an Aigand lamp, purified, if necessary, by an achromatic condenser. Direct light is seldom, if ever, used. On the whole, the machine presents rather an ungraceful and unpoetical appearance, and as such, we should hardly have looked for it from such a source. We do not think that any one, even the Dr. himself, will be likely to make very frequent use of it.

The instruments of the present day have been brought to such a state of perfection, that one can hardly see any room for a decided innovation; still this may possess advantages of which we are unaware, and the source from which it emanates, bespeaks for it a consideration from practical microscopists.

F.

The American Medical Society in Paris.—We notice in the February number of the American Medical Monthly, an appeal from the secretary of the American Medical Society in Paris, to the editors of medical periodicals in this country, "to furnish the society, free of expense, the respective journals which they conduct. This call was responded to some time since, but the journals have now been discontinued with the exception of two. It is of the greatest importance that American medical literature should be diffused

abroad, and we have in this an admirable opportunity of fulfilling this end. We ourselves, therefore, cheerfully respond to this appeal, and are confident that it will meet with a like reception from all of our editorial confrères. "Gentlemen wishing to accord this favor, will please to forward the Journals to Mr. Paul Bossange, 20 Beekman street, New York, who has generously offered to transmit, free of expense, all books and papers intended for the society.

F.

The Hand-book of Practical Receipts for Every-day Use. A Manual for the Chemist, Druggist, Medical Practitioner and Heads of Families. Comprising the Official Medicines, their uses and modes of preparation; and Formulæ for Trade Preparation, Mineral Water, Powders, Beverages, Dietetic Articles, Perfumery, Cosmetics, etc. A Glossary of the Terms used in Chemistry and Medicine, including Old Names, Contractions, Vulgar and Scientific Denomination. With a copious Index to all the Preparations. By THOMAS F. BRANSTON. First American, from the Second London Edition. Philadelphia: Lindsay & Blakiston. 1857.

This little book has met with much favor on the other side of the Atlantic: sufficient, indeed to encourage its re-publication in this country. By reference to the title-page, it will be seen that it contains a number of receipts useful to every one. We can cheerfully recommend it as a very valuable book, and one which is all that it purports to be.

F.

Urethro-Vaginal and Vesico-Vaginal Fistula. Remarks on their Peculiarities and Complications; their Classification and Treatment; Modification of the Button Suture; Report of Cases Successfully Treated. By N. BOZEMAN, M. D., of Montgomery, Ala.

The interesting and original papers which are embodied in this pamphlet have been extracted from the North American Medico-Chirurgical Review for July and Nov., 1857. Dr. Bozeman has acquired quite a reputation within the last few years in the treatment of this distressing and disgusting difficulty. The paper which we have before us is based on the analysis of twenty-five cases, which have been treated by him, and operated upon; in only two of these was the result a failure, and in these he was only partially unsuccessful. We are glad to receive these essays in a distinct form, and in the name of the senior editor, tender our thanks to the author.

F.

Dr. Treadwell's Bequest.—Mrs. Dorothy, widow of the late Dr. John Dexter Treadwell, and mother of the late Dr. John Treadwell, of Salem, having deceased on the 29th Jan., a large amount of the property left by her son reverts to Harvard College, for the establishment of a professorship of physiology. We have already printed the conditions of the bequest, which are such as, in our opinion, hardly to make it available to the college. We hope that the corporation will decline the trust, in which case it will go to the Massachusetts General Hospital, where it is greatly needed.—*Boston Med. & Surg. Jour.*, Feb. 4.

Atlanta Medical College—Resignations and Appointments.—Professors Boring and Means have resigned their respective Chairs of Obstetrics and Chemistry, in the above institution.

To fill the vacancy caused by the retirement of Professor Boring, Dr. T. S. Powell, of Sparta, has been appointed by the Trustees; we hope that the Institution will be able to secure a successor to Professor Means.

Dr. Means retains his connection as Professor of Chemistry with the Medical College of Georgia.—*Southern Med. & Surg. Journal*.

Buffalo Medical Association.—Our present number is deprived of the Proceedings of the Buffalo Medical Association by the adjournment of its regular meeting until Wednesday, Feb. 10th, thus making them too late for this issue. Both the February and March proceedings, therefore, will appear in the next number.

Wythes' Pocket Dose Book.—A very useful and convenient pocket remembrancer of things which are apt to slip from the memory of the practitioner. As such, we know of none which has been more extensively used and is more favorably known to the profession. Published by Lindsay & Blakiston, Philadelphia.

American Medical Association.—The Eleventh Annual Meeting of this Association, will be held in the city of Washington, on Tuesday, May 4th, 1858. The secretaries of all societies and other bodies entitled to representation in the Association, are requested to forward to the secretary, Alexander I. Semmes, Washington, correct lists of their delegations as soon as they may be appointed; and the Committee of Arrangements earnestly desire that the appointments may be made at as early a period as possible.—*The Med. News and Library.*

New Journal of Physiology.—Dr. Brown Sequard has sent us the prospectus of a journal of physiology, of which he is to be the principal editor, and which is to be published quarterly, on the 1st of January, April, July, and October—each number to contain from one hundred and sixty to two hundred pages. He is to be assisted in his enterprise by Drs. Ch. Robin, Ch. Rouget, and Tholozan, &c.

His journal, in addition to pure physiology, will embrace:

1. Organic chemistry, hygiene, toxicology, and legal medicines in their relations to physiology.
2. Descriptive anatomy, comparative anatomy, teratology, and normal and pathological histology, so far as they illustrate physiology.
3. The applications of physiology to the practice of medicine, surgery, and obstetrics.

The subscription will be 18 francs, at Paris, payable in advance.

We invite the attention of the profession in this country to this Journal. It may be obtained through I. Pennington & Son, of Philadelphia.—*Ibid.*

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

APRIL, 1858.

NO. 11.

ORIGINAL COMMUNICATIONS.

ART. I.—*Abstract of Clinical Lectures delivered at the Buffalo Hospital of the Sisters of Charity, upon the Diseases treated in the Male Medical Ward, by AUSTIN FLINT, M. D., Attending Physician, during the present College Session, viz., from October 14th, 1857, to February 27, 1858. Reported by A. W. NICHOLS, M. D., Assistant to Chair of Clinical Medicine, University of Buffalo.*

No. V. For February.

Pulmonary Tuberculosis: a New and Reliable Physical Sign of Excavation; Effect of Hæmoptysis on the Progress of the Disease; Period of Occurrence, with Cases happening late in Life; Duration of the Disease; Treatment by Sustaining Measures, with Palliatives. Acute Phthisis, Case of. Interesting Cases illustrative of the foregoing, &c.

The subject of phthisis, or tuberculous disease of the lungs, is by no means exhausted. Within quite a recent period, more correct ideas respecting the nature of tuberculosis have become prevalent, and the symptoms and physical signs of the disease have been more carefully studied, especially in reference to the diagnosis of tuberculosis in its earliest stages. The methods of

treatment, also, have been materially improved; and, in not a few instances, individuals, by more judicious management, have been restored to a comparative degree of health. Although so much attention has been paid to the pathology, diagnosis, and the treatment of phthisis, yet there remains many matters of interest and of importance to be determined by future observation and reflection.

It is not our object at present to enter into a detailed account of this disease, but simply to discuss a few points of practical and of scientific interest, relating to the physical signs, the symptoms, and the treatment of tuberculosis of the lungs; and to bring forward a few of the more striking cases that have been admitted to the ward, during the past winter, as illustrations of the subject under consideration.

Notwithstanding the numerous discoveries in physical exploration of the chest, heretofore we have not been in the possession of a reliable physical sign indicative of a cavity or cavities in the lungs. As a matter of practical importance relating either to diagnosis or to treatment, this is of comparatively little consequence; for the condition of the patient, and other physical signs, usually render the diagnosis sufficiently accurate; and as for the treatment, the general measures, (as we shall see hereafter,) applicable to every stage of the disease, are more imperatively demanded at this period. As a matter of scientific interest, however, the subject claims our attention.

If we turn back to ascertain the views of the discoverer of auscultation, we shall find that he regards pectoriloquy as the physical sign most distinctive of a cavity, and considers its presence almost positive evidence of an excavation. In treating of bronchial and cavernous respiration, Laennec insists on the importance of distinguishing the former from the vesicular respiration. But, in comparing the cavernous with the bronchial respiration, he says, "This variety has the same characters as the preceding, (bronchial,) only that it further converts the idea of air entering into a larger cavity than a bronchial tube." And to show that the distinction between the two was not always readily drawn, he adds, "and when there exists any doubt," &c.* It is evident, that Laennec regarded cavernous respiration as a variety only of the bronchial respiration, and not as an entirely different kind of respiration.

Passing from Laennec to a distinguished investigator of diseases of the chest, in more recent times, we find Walshe describing the respiratory sound proceeding from a cavity, as "hollow, hoarse, blowing, and cavernous, or

* Laennec on the Chest. Translated by Forbes. 3d revised London ed. 1838.

actually amphoric." He speaks of the difficulty of hearing a pure cavernous respiration, on account of its characters being marked by the "diffused blowing," (diffused bronchial respiration,) "which is the result of the condensation existing around the excavations." The cavernous respiration is hollow, the pitch *lower* than in tubular (or bronchial) respiration, and not as quickly produced or evolved. This kind of respiration, he remarks, is often deficient where excavations exist. But he believes that it is never present where excavations are absent.* It will be seen that some advance has been made towards determining the distinctive characters of the cavernous respiration, since the time of Laennec. But, Dr. Walshe does not make mention of any difference in the characters of the inspiratory and expiratory sounds in cavernous respiration.

Skoda, writing about the same time, states that "a cavity in a lung does not always yield the same murmur." He speaks of the various physical conditions of excavation; and endeavors to determine the characters of the various sounds by the "laws of consonance," of which theory he is the great advocate. But, the nearest approach he makes to any thing definite, is in what he says concerning certain cavities with membranous walls, where the surrounding lung is not solidified to any great extent. "In such cases the air causes a feeble murmur, not resembling the vesicular, but *something between an aspiration and a blowing*." To sum up, he concludes, "that percussion and auscultation afford very few certain signs of the presence of a cavity."†

As long ago as 1852, Prof. Flint described the cavernous respiration as a distinct type of the respiratory sound; and clearly pointed out the characters of the inspiration and of the expiration.‡ These views are developed more at length in a more recent work.§ Since the publication of this work abundant opportunities have been afforded of verifying the statements regarding the cavernous respiration, as well as of developing more fully the characters of a kind of respiration mentioned in the above work as the *broncho-cavernous*.

Having already consumed so much space in the consideration of the opinions of the authors referred to, we refer the reader to Prof. F.'s work, for a complete description of the cavernous respiration. We shall merely recapit-

* Walshe on the Heart and Lungs. London edition of 1854.

† Skoda. Translated by Markham. Published at Philadelphia, 1854.

‡ Vide *Prize Essay*, 1852.

§ Flint on the Respiratory Organs. 1856.

ulate the distinctive qualities of the bronchial and of the cavernous respirations as described by Dr. F.

In *bronchial respiration*, the sound is tubular, and there is an interval between the sound of inspiration and that of expiration; the inspiration is high in pitch, shortened in duration, and rapidly evolved; whilst the expiration is prolonged, (being frequently as long or longer than the inspiration,) generally more intense than the inspiration, rarely absent, the pitch *higher* than that of inspiration, and sometimes present without inspiration.

In *cavernous respiration*, the sound is likewise non-vascular, with an interval between the inspiratory and expiratory sounds; the inspiration is blowing, low in pitch, and slowly evolved; the expiration being feeble, sometimes absent, but when present the pitch *lower* than that of inspiration.

There is a variety or modification of respiration frequently heard in the advanced stages of tuberculosis, and of this we desire to speak more particularly, at this time. Prof. Flint's attention was directed some years since to the coëxistence of bronchial and cavernous respirations in the same locality, in cases of phthisis more or less advanced. In his work above alluded to, this combination of the two kinds of respiration, he has styled, *broncho-cavernous*; in some cases the *bronchial* characters predominating, and in others, the *cavernous*. The reason for this will appear evident, when it is recollected that solidification to a greater or less extent exists around the cavity; and according to the size of the cavity, or the number of the cavities, and the amount of condensation surrounding them, does the respiration present more of the cavernous or more of the bronchial qualities. If there be one or two excavations of considerable size, and the surrounding lung be solidified to a small extent, then the characters of the former will predominate. If, on the other hand, the excavations are smaller, (although more numerous, perchance,) and the intervening tissue be solidified, the bronchial characters predominate.

The distinctive features of this variety of respiration may be stated as follows: the sound tubular or blowing, and an interval between the inspiration and expiration; the inspiration the same as that of the bronchial or of the cavernous, according to the predominance of the one or the other types of respiration, generally the qualities of the former more marked; the expiratory sound, however, possessing the most distinctive features. The bronchial respiration being more rapidly evolved than the cavernous, the first portion of the expiratory sound is generally bronchial; the cavernous respiration being rendered inappreciable by the intensity and rapidity of production of the former respiration. The *latter* portion of the expiratory sound is cavern-

ous: the bronchial qualities having disappeared or been rendered inappreciable by the cavernous sound. This *change in pitch in the course of the expiratory sound*, is the distinctive feature of this modification of respiration. And this very peculiarity renders the *broncho-cavernous* respiration sufficiently easy for any practised ear to discover. From the physical conditions which give rise to it, it is met with very frequently; and when discovered, denotes not merely the fact of tuberculous solidification, but the actual existence of excavations. It is rendered still more valuable by the infrequent occurrence of a pure cavernous respiration. Having the present physical sign, we need not direct attention to the chest, in search of a purely cavernous respiration. In regard to its importance, the *broncho-cavernous* respiration is to the diagnosis of the advanced stages of tuberculosis, what the *broncho-vesicular* is to that of the earlier stages.

For the sake of convenience of reference, and in order to render the difference between the several types of respiration and their combinations more striking, we have arranged them in a tabular form. Reference may be made to the appendix, for cases illustrative of this variety or combination of respiration. (Vide cases iv, v, vii and viii.)

Tabular view of the Types of Respiration, and of their Modification.

<i>Respiration.</i>		
<i>Vesicular.</i>	<i>Bronchial.</i>	<i>Cavernous.</i>
Normal.	Whenever there is solidification.	Rarely heard pure or uncombined.
<i>Sound:</i> Vesicular.	<i>Sound:</i> Tubular.	<i>Sound:</i> Blowing.
<i>Interval:</i> Does not exist between inspiration and expiration.	<i>Interval:</i> Exists between inspiration and expiration.	<i>Interval:</i> Exists between inspiration and expiration.
<i>Inspiration:</i> Vesicular in quality; low in pitch; longer than expiration; slowly evolved.	<i>Inspiration:</i> Tubular in quality; high in pitch; shortened in duration; rapidly evolved.	<i>Inspiration:</i> Blowing or non-vesicular in quality; low in pitch; and slowly evolved.

<i>Expiration:</i> Lower in pitch than inspiration; shorter in duration, and less intense than inspiration; often absent.	<i>Expiration:</i> Tubular in quality; higher in pitch than inspiration; as long or longer than inspiration; generally more intense than inspiration; rarely absent; sometimes present without inspiration.	<i>Expiration:</i> Blowing in quality; lower in pitch than inspiration; shorter, and less intense than inspiration; sometimes absent.
--	--	--

Modifications or Combinations.

Broncho-Vesicular.

Frequent; heard in the early stages; distinctive of more or less solidification due almost invariably to tubercle.

Sound: Mixed, tubular and vesicular.

Interval: Exists between inspiration and expiration.

Inspiration: Composed of tubular and vesicular qualities; pitched raised; frequently shortened.

Expiration: Pitch somewhat higher than that of inspiration; prolonged and generally more intense than expiration; usually present, and sometimes present without inspiration.

Broncho-Cavernous.

Frequent; heard in later stages; distinctive of cavity or cavities, surrounded by more or less solidification.

Sound: Mixed, tubular and cavernous.

Interval: Exists between inspiration and expiration.

Inspiration: Composed of bronchial and cavernous qualities; usually the former predominating.

Expiration: Pitch at first high, then suddenly becoming low; prolonged and non vesicular; always present, in order to constitute this combination.

Effect of Hæmoptysis on the Progress of the Disease.

One of the most frequent symptoms attendant upon pulmonary tuberculosis, is hæmoptysis.* It may occur at an early or at an advanced period of the disease, and even before the deposit of any tuberculous matter has taken place. It is a symptom which, when it occurs in an individual who had supposed himself unaffected with disease, attracts attention, and almost always leads him to ascertain the condition of the lungs.

The subject of hæmoptysis in its relation to tuberculosis, has been carefully investigated by Dr. Walshe. The conclusions he arrives at, are important. Only those which have an immediate bearing on the views we are desirous of developing, will be mentioned in this connection. For more extended remarks, reference may be made to Dr. Walshe's article, in the *British and Foreign Med.-Chirurg. Review*, for Jan., 1849.

Does hæmoptysis exert a favorable or an unfavorable effect on the progress and duration of tuberculosis, when it occurs in the early stages of the disease, or at any period when it may not be attributed to the rupture or ulceration of a blood-vessel of considerable size? When it occurs before the existence of any physical sign denoting a tuberculous deposit, that is, very early in the disease, does it exert any influence on the deposition of tuberculous matter? Whenever it takes place, but more particularly in the early periods of the disease, does it not prevent the deposit of tubercle which otherwise would have been formed?

These are important questions having a direct bearing on our therapeutical views; and they can only be answered by the results of clinical observation. Dr. Walshe found, that hæmoptysis occurred in 81 per cent. of the cases he examined; that it was more frequent in the second and third stages than previously; that it increased in frequency with advancing years; that this greater frequency in persons of more advanced years, did not depend altogether on greater duration of the disease; that the most common periods for its occurrence, were at the very outset or after the expiration of the first month; that season did not appear to exercise any marked influence on its

* It occurred in 91 of 100 cases analyzed by Prof. F.. In 53 of these, it had taken place before the chest was examined; about 53 per cent. In 22 instances of small tuberculous deposit, it had occurred in 13; or 59 per cent. In 11 cases in which the existence of cavities was ascertained, hæmoptysis had been observed in 6, or about 54 per cent. And of 58 cases of abundant deposit, it had occurred in 34, or over 58 per cent.

first occurrence; that it never appeared as the *bonâ fide* first symptom in these cases, it being so only in the sense that it was the first occurrence that led them to watch their health. This last conclusion, he remarks, "leads one to reject the notion, that phthisis is really caused by hæmoptysis where it *appears* to be the first symptom." He adds, that "hæmoptysis is frequent in proportion to the duration of the primary disease." Hence, "we are forced to conclude, that *frequently-recurring hæmoptysis does not reduce the mean duration of life, after seizure with tuberculous symptoms, in any given mass of cases!*" Hæmoptysis, according to the same authority, may act as a local therapeutical agent; and that it is a mere coincidence when it occurs, and the disease *rapidly* proves fatal. These certainly are not fabled conclusions, and, if correct, having an important bearing on the treatment of phthisis.

For some time past, Prof. F. has expressed the belief, as based on his observations, that hæmoptysis was not an event to be dreaded; that it did not actually abridge the life of the individual; that, after its occurrence, the symptoms and physical signs did not indicate at the least, a worse condition of the patient; that in cases of frequently-recurring hæmoptysis, the patients live fully as long as, and even longer than, where this was not the case.

Still more recently, Dr. F., (from a more extended investigation of this subject,) has advocated the view, that hæmoptysis is to be regarded in a favorable light. We speak of it as occurring in the earliest periods of the disease, and when not excessive in quantity. It actually retards the progress of the disease. Why? Because we have every reason to warrant the opinion that the loss of a certain amount of blood is substituted for a deposit of tuberculous matter which would otherwise have taken place. The local hyperæmia of the lung has been relieved by the escape of the blood; if this congestion, which is supposed to exist generally, prior to the deposit of tubercle, had not been relieved in this way, then the deposition of a greater or less amount of tuberculous matter might have been anticipated. A few striking instances tending to illustrate these conclusions, will be found in the appendix. (Vide cases i, ii, and iii.)

Period of Occurrence, and Duration. In regard to the period at which pulmonary tuberculosis is most likely to occur, observers do not differ. It is rare to meet with this disease developed late in life. Two cases of this kind are related in the appendix, the patients being quite advanced in years. (Vide cases iii and iv.)

The duration of the disease is stated to be, according to M. Louis, in 307

cases, as follows: At the end of nine months, 147 alive, or about 48 per cent; at the end of two years, only 48 alive, or about 14 per cent.

Of the cases in the ward, which are now in the more advanced stages of the disease, the duration has been as follows: Four cases which were in the ward when the winter service commenced, are now in no immediate danger of a fatal termination; in one, the disease has existed seven years; in another, over five years; in a third, over three years; and in a fourth, over one year. Thus, we notice that the duration of the disease, under the present method of treatment, is much longer.

Treatment. The results of the treatment, or more appropriately of the management of the cases of tuberculosis in the ward, during the past winter, have been highly satisfactory. With the exception of a single instance, no patient has succumbed to the disease. This exception occurred in a person advanced in years, and who was admitted in a state of extreme prostration; he died about eight and forty hours after entering the hospital. Still farther, not a patient who has been under management more than a few weeks, has deteriorated in condition. Every case of this disease that has remained in the ward since the commencement of the winter service, (October 1st, 1857,) has either exhibited more or less improvement, or remained *in statu quo*. Although the number of cases is somewhat smaller than desirable, yet they have shown all the different stages of the disease. The foregoing results have not only attended cases of incipient tuberculosis, but likewise cases in which great portions of the lung were solidified or in which excavations existed.

Dr. Walshe states, that the number of patients leaving the hospital *improved* or *unadvanced*, was more than double that leaving it in a *worse state* or *dying within its walls*. "In above four per cent. of the cases, complete restoration to health, not only as regards apparent disturbance of the functions generally, but as regards local evidence of active pulmonary disease, was effected." "All patients whose condition grew worse, while they were in the hospital, had reached the stage of excavation on admission." "Improvement is more probable than the reverse, even where excavation exists on admission."

In what did the measures of management of the patients, under care this winter, consist? In the first place, *very little medication*, just sufficient to palliate or relieve unpleasant symptoms as they appeared; of which treatment, *anodynes* formed a considerable part. In the next place, *sustaining measures*, comprising a *generous diet* and the moderate use of *alcoholic li-*

quors. Very little resort has been made to *cod liver oil*, for two reasons: those who did make use of it, after a short time became tired of it, or complained of the nausea which it produced; and those who did not take it, exhibited a condition so satisfactory, as to render the employment of it quite unnecessary. No matter what may be said in its favor, cod liver oil is an unpleasant article to take, and when tolerated, the patient sooner or later longs for a change of medicine. It is still undecided whether this oil possesses any intrinsic value, or whether any other kind of oil, perseveringly employed, would not be attended with as much benefit as has been attributed to the use of the cod liver oil. Besides, there are other agents which we are able to employ, with as great, if not greater benefit. Of these, alcoholic liquors are the most important. *Whisky* has been the form generally made use of in the ward. It has been given in doses sufficiently large to exert some appreciable effect on the system; but not so large as to occasion any of its intoxicating effects, nor even to produce exhilaration of mind. In most of the cases under treatment this winter, this article has formed one of the chief measures of treatment. *Tonics* have sometimes been given, and have been continued for a length of time. They have been quite useful. The articles generally employed have been Huxham's tincture of bark, and quinia and iron.

The *diet* has consisted of meat, eggs, animal essences and broth, with milk, and farinaceous articles, and some vegetables. As small an amount of food not highly nutritious, has been allowed as has been practicable.

The symptoms most frequently calling for relief, have been cough, pain and diarrhoea. Anodynes have of course been employed, such as morphia. The cough syrup of the ward, (a solution of morphia in syrup of tolu,) has acted very well in the relief of cough and of pain.

By persevering in the medicines employed, and by strict adherence to the sustaining course of management, the condition of the patients has always improved, or at least has remained the same. For the most marked results attributable to this plan of management, see appendix, (cases vi, vii and viii.)

Acute Phthisis.

A case of acute phthisis has come under observation this winter. This variety of tuberculosis is sufficiently infrequent to admit of our reporting the case at some length.

It will be seen, by a review of the symptoms, that the diagnosis of the case was not easy. It might readily have been mistaken for typhoid fever or

for acute bronchitis. From either of these diseases it was distinguished by the absence of some of their diagnostic traits. The physical signs denoted merely bronchitis; and the true nature of the disease could only be determined by a careful consideration of the most prominent symptoms.

This form of phthisis depends on the presence of gray, semi-transparent granulations diffused more or less abundantly over the lobes of both lungs. This variation from the law of the disease as it usually occurs, renders the information derived from physical examination of the chest, comparatively unimportant. But, the rapidity of the pulse, the prostration of the patient, and the sudden and repeated attacks of difficulty of breathing, with the absence of much cough, great pain, or any amount of expectoration, are symptoms strongly indicative of acute phthisis, in any instance like the following.

Nov. 19th, 1857.* Case of J. W., German, aged 26 years, farmer; admitted yesterday afternoon. Has been five years in this country; enjoyed good health up to about six years ago, when he seems to have had an attack of acute rheumatism, which confined him to bed, some six or seven weeks. After recovering from this sickness, he continued well up to April last. He was seized with a cough, accompanied by considerable expectoration, but he did not suffer from pain in the chest. He continued to work about one month after he noticed the cough, but was obliged to discontinue his occupation on account of weakness.

About four months since, he appears to have had an attack of sub-acute rheumatism, which has continued up to the present time. This did not oblige him to take the bed, only occasionally. He has had cough constantly for about one month. He states that his parents and the members of their family, are well. None of them have ever been affected, to his knowledge, with any disease commonly esteemed hereditary.

His condition, on admission, was as follows:

Slight capillary congestion of face, diffused.

Aspect not morbid; mind clear.

Cannot sleep at night, on account of febrile movement; has no headache.

Had an attack of epistaxis, one week since; and has had it previously, after the act of coughing, when severe.

Tongue moist, not coated; occasional thirst.

Appetite good; no nausea nor vomiting at present; bowels regular.

* This case has not been included in the consideration of the foregoing subjects as it belongs to a peculiar and unusual form of tuberculosis. z.

Pulse 100, compressible, full, regular.

Cough frequent during the night; expectoration moderate in amount, and consisting almost entirely of clear mucus; has no pain in the chest at any time except after severe paroxysms of coughing.

Skin warm and moist; perspires whenever he falls asleep.

Has never had an attack of hæmoptysis.

Occasionally has suffered from sharp pain in the left side of the chest.

Is able to be up during the day; but feels very weak.

Urine is abundant, with some lateritious deposit.

On examination of the joints, both knees, both ankles, and both wrists were found to be swollen; there was no redness present; pain was only elicited by firm pressure and on motion. During the night, however he experiences pain in the muscles of both the upper and lower extremities.

November 30th. Since last record patient has continued much the same. An intermittent bellows murmur has been discovered, referrible to the aortic orifice; but now, it has disappeared.

December 18th. Patient has so far improved as to be able to sit up and to walk about, merely complaining of weakness. The treatment has been of late, quinia and opiates at night, with good diet.

January 1st, 1858. Patient suddenly attacked during the night, with sharp and stitch-like pains in both sides of the chest. There was much difficulty of respiration. The cough was frequent, and the expectoration was copious, but entirely composed of *clear mucus*. These symptoms continued at the time of the morning visit. Then, on examination of the chest, *no disparity* on percussion existed, and the resonance was not affected; *sibilant and sonorous râles* were heard universally over both sides of the chest.

These symptoms abated in a few days. But, on the night of January 8, the patient was attacked suddenly and presented the same symptoms as on the 1st instant. The expectoration consisted of nothing but perfectly *transparent mucus*. These symptoms became less marked in a short time. He kept the bed, however. His strength gradually failed. He began to emaciate rapidly. His features became pinched.

His condition on the 22d of January, was as follows:

Sleeps comfortably at night: complains of the febrile movement, however; has slight headache; feels very weak; emaciation considerable.

Aspect decidedly morbid.

Has considerable thirst; his appetite is good.

Has had, and still has *diarrhœa*; there is no pain in the abdomen.

Skin warm and mellow.

There is some loss of voice; has complained of pain referred to lower part of trachea.

Can swallow only a small amount at a time.

Complains of slight pain in the chest.

Pulse 120, quick, full.

Respirations 24, somewhat hurried; the superior and inferior costal types of respiration were marked.

Cough not severe; expectoration moderate, consisting almost entirely of clear mucus, occasionally a little blood, and an opaque sputum.

During the period of the sudden attacks of pain with hurried breathing, he exhibited some *delirium*: not only at night, but during the day, he occasionally muttered and talked incoherently.

Lately, however, his mind has been clear, and he has shown a singularly contented and tranquil disposition, making no complaints and being apparently resigned to his situation.

He continued to present the same category of symptoms: emaciation became extreme; he grew weaker and weaker; the pulse continued frequent; the expectoration diminished in amount, but its characters continued the same; and whenever the chest was examined, the dry bronchial râles were found everywhere present associated with no disparity on percussion, and no marked diminution of resonance. These were all the signs elicited, at any time, by repeated and careful physical explorations.

On the evening of the 8th of February, about five weeks after the first attack of pain, &c., he quietly died.

It remained only for a post mortem examination to confirm the correctness of the diagnosis. This, however, was not practicable. The case is interesting, on account of exhibiting in its course, so many resemblances to acute bronchitis and to typhoid fever.

APPENDIX.

CASE I. *Pulmonary Tuberculosis, accompanied by frequent attacks of Sub-acute Rheumatism; Repeated attacks of Hæmoptysis; Disease, singularly non-progressive; Effect of the Iodide of Potassium.*

April 12th, 1855, T. C., aged 30, Irish, tailor.

Previous History. He states that when he was about 16 years of age, he had an attack of hæmorrhage; from his account, it was impossible to ascertain whether the blood came from the lungs or from the stomach; he

attributed the occurrence to over-exertion. After this even the enjoyed good health up to a little less than two years ago, with the exception of frequent attacks of sub-acute rheumatism, which he has been subject to since he was 16 years of age. Summer before last he had a cough, which was slight, and to which he paid but little notice. He thinks that he lost flesh during that summer. In the autumn following he had an attack of *hæmoptysis*, considerable in amount; and the hæmorrhage continued off and on for about three weeks. He had a slight recurrence of hæmoptysis last summer; with this exception, it has not occurred since a year and a half ago. After the attack of hæmoptysis, autumn before last, he went to Tennessee, and remained there till last May, nearly a year since. During the winter he was South, had more or less cough and expectoration. Has been in this city since last May. He has had more or less cough and expectoration during last summer, and was able to work at his trade but a portion of the time. During last winter, he was unable to work. The cough and expectoration continued. He has been troubled much of the time with rheumatism affecting the joints, sub-acute in character. He is now laboring under an attack of this kind, affecting the joints of the phalanges and metacarpus. The rheumatism has confined him to bed. Aside from this, he is able to be up and about. He has lost considerable flesh, but he does not know the amount.

Present Condition. He does not present an appearance of emaciation, nor is his aspect notably morbid. Appetite capricious; no diarrhoea, except for a short time last summer; skin cool; has had chills occasionally; Pulse 80; feels the want of breath on active exercise; the respirations are not accelerated; there is considerable expectoration, which is muco-puruloid; he has but little cough.

Physical Signs. Evident depression below the right clavicle; dullness marked at the summit of the right chest, and also over the right scapula; no disparity, on percussion, below scapula. In right infra-clavicular region, the inspiratory sound is much less developed and shorter than on the left side; it is too feeble to determine satisfactorily the pitch and the quality. On the left side, it is well developed, prolonged, and vesicular in quality. A prolonged, relatively high-pitched expiration exists on the right side; but no expiratory sound is heard on the left side. Local resonance is greater at the right than the left summit.

He has been placed on the use of cod liver oil.

April 13, 1856. This patient has been in the hospital for the past four months, and has suffered more or less from rheumatism during that time.

On physical exploration of the chest, the signs denoting solidification at the right lung, were more decided. Besides, there were present the moist and dry bronchial râles limited to the summit of the same lung. There were no signs present indicative of an excavation.

May 14th. Sat up.

He has lately been taking the iodide of potassium; whenever this has been administered, the rheumatic affection has been relieved, but there has appeared on the face and neck, a papular eruption, which soon disappears when the remedy is discontinued, and when continued becomes vesicular and pustular.

On the 25th of May he left the hospital.

November 6th, 1856, he was readmitted with an attack of sub-acute rheumatism. He has had frequent attacks of rheumatism since he left the hospital. Has been at work part of the time. The cough has continued, and the expectoration is now greater than at any time heretofore, and consists of distinct, opaque sputa. There has occurred *slight hæmoptysis*, twice during the summer. His aspect is morbid; has lost some flesh since May last, but is not emaciated. The pulse is 64; respirations 16.

On examination of the chest on the 14th of November, the physical signs denoted no great extension of the disease on the right side, and no excavation existing; but they showed that the summit of the left lung, heretofore unaffected appreciably, was now more or less solidified by tuberculous deposit.

January 7th, 1857. This patient continued to take the iodide of potassium from the 28th of November until the 14th of December, in five grain doses, three times daily. On the latter day the dose was increased to ten grains; this was continued until the 18th of December. On the 18th and 19th, having complained of nausea, and having vomited, the medicine was discontinued. Its use had been attended with the papular eruption so frequently observed previously. On the 20th the sub-nitrate of bismuth was administered. On the 21st, the patient presented all the appearance of mercurial *salivation*, except that the fetor of the breath was not so marked as in ptyalism from a mercurial. The bismuth was examined by Prof. Hadley, and found to be free from any impurity. The mouth soon became sore; the gums were tender and separated from the teeth; the teeth became loose; small ulcers formed upon the mucous membrane; and the quantity of saliva poured out was great. The rheumatic affection rapidly disappeared; and

the cough, expectoration, and pain in the chest, were notably diminished. From this ptyalism he gradually recovered. It is a fact worthy of note, that the salivary glands did not appear to be affected during this salivation.

April 22d, we find the patient relieved of the ptyalism, up and doing light work about the ward. He now complains of pain in the chest, which, on examination, proves to be an attack of intercostal neuralgia.

He was soon relieved of this pain, and during the summer continued in the hospital. He suffered occasionally from attacks of sub-acute rheumatism. The cough and expectoration continued.

November 14th. This patient had an attack of hæmoptysis, a considerable amount of blood was lost, about half a pint.

December 30th. For a few days past has been complaining of rheumatism in the joints. No iodide of potassium has been given for a month. To-day, the papular eruption has made its appearance, although not as abundantly as usual. The rhematic attack is abating.

(The above fact is interesting, on account of the appearance of an eruption supposed to be produced by the iodide of potassium, when over four weeks had elapsed since any of that article had been used. Here is another instance of the caution to be observed in drawing conclusions respecting the effects of therapeutical agents in the treatment of disease.)

January 24th, 1858. His general health is as good as when seen in October last. He is not emaciated. He is free from rheumatism. He has but little cough, and occasional expectoration. He complains of no pain in the chest. His pulse and his respirations are not accelerated. His aspect is improved. he has no diarrhoea.

CASE II. *Pulmonary Tuberculosis; Very frequent attacks of Hæmoptysis; Fistula in ano. Slow Progress of the Pulmonary Disease.*

December 9th, 1857. M. S. Q., aged 33, seaman, colored; has been in the hospital about two weeks.

Previous History. States, that up to five years since, considered himself perfectly well. The first symptoms that attracted his attention, were coughing and expectoration, but accompanied by no hæmoptysis. This was in March, 1853. He weighed then 108 pounds. The character of the expectoration was distinct, opaque, yellow sputa, with some clear mucus. Frequently suffered from stitch-like pains in the summit of both lungs.

About four or five weeks after cough commenced, had an attack of hæ-

moptysis. The blood was expectorated without any previous pain, and did not exceed a tablespoonful in amount. These attacks of hæmoptysis have continued more or less ever since: on the average, he thinks, at least once every week. Soon, he commenced to perspire at night, and to loose flesh. Did not notice any loss in strength, and did not take to the bed until the appearance of the fistula. The cough and expectoration continued. Did not have attacks of diarrhoea. Felt unwell a day or two prior to the formation of the fistula. The fistula commenced as an ordinary boil; this discharged a considerable quantity of matter and there has been more or less discharge from the fistula ever since. The fistula made its appearance about one year since. Another fistula soon formed on the same side of the anus, but nearer to the nates. Both of these are incomplete fistulas. He has continued to work much of the time since the fistula appeared. After the fistula had been formed, he noticed the cough to become less severe, and the expectoration to diminish in quantity; the attacks of hæmoptysis were also less frequent.

Present Condition. Aspect not morbid; not much emaciated; weighs now 170 pounds. Has no night sweats. Sleeps well. Feels weak; is up and about all of the day. Appetite fair; bowels regular. Does not complain of any pain in the chest. Has frequent cough: the expectoration is alight and consists of yellow sputa mixed with a little blood; expectorates a small quantity of blood almost every day. Pulse well-developed, slow, 72. Respirations tranquil, and number 16. Skin warm. The fistulas discharge considerably at present.

Physical Exploration. On the left side, in the infra-clavicular region and upper scapula, vesiculo-tympanic resonance on percussion. Greater vocal resonance in same regions, on the left, than on the right side. A sibilant râle confined to same regions on the left side. Broncho-vesicular or rude respiration, on left side, in these regions; on right side, same regions, vesicular respiration. Greater expansion of infra-clavicular region on right side. In lower portions of chest, in front and behind, no disparity on inspection or by percussion; vesicular respiration heard on both sides, below.

CASE III. Pulmonary Tuberculosis: Developed in Middle Period of Life; Several Attacks of Hæmoptysis; Slow Progress of the Disease.

February 3d, 1858. J. C., Irish, aged 50, laborer. States, that he considered himself well up to about six years ago: noticed then, that he had a

dry, hacking cough, accompanied by no expectoration, neither any pain in the chest. The cough soon became more severe, and a slight expectoration appeared. Observed that he became short of breath on active exercise. He began to lose flesh and strength. Suffered from night-sweats. About five years since, was attacked with intermittant fever, from which he has never been entirely free, since; has a paroxysm every few weeks, or oftener. Soon after he was attacked with intermittent fever, noticed a swelling in the right lumbar region which was opened and discharged a considerable quantity of pus.

Present Condition. Aspect sallow, unhealthy. Has lost about thirty pounds in weight, Feels weak, and cannot do a hard day's work, but is able to be up and about all day. Appetite poor; bowels regular; has had no diarrhoea. Pulse 64, quick and small. Respirations somewhat labored, and number 24. Has no pain in the chest now. The cough is frequent; expectoration copious, and consisting of yellow, opaque sputa. Says, that within the past six years he has had three attacks of hæmoptysis: the last occurred about two weeks since; expectorated a large amount of blood. The abscess in the right lumbar region has not discharged since November last. He complains most, at present, of shortness of breath on moderate exercise.

Physical Signs. The physical signs showed tuberculous solidification, somewhat extensive, at the summit of the right lung; bronchial respiration existed in the infra-clavicular region of this side; the other signs were very similar to those recorded in Case II, as found at the summit of the left lung; there were no physical signs of excavation.

CASE IV. Pulmonary Tuberculosis: Developed in Advanced Life; Stage of Excavation; Broncho-cavernous Respiration.

February 7th, 1858, J. S., Irish, aged 78. Admitted on the 2d instant, very much prostrated. His feeble condition prevented our obtaining a full account of his previous history.

He stated that he was attacked with cough and expectoration about eighteen months ago, which have continued ever since; he has suffered from sharp pain in the chest. Prior to eighteen months since, considered himself well. He was very much emaciated. The cough was frequent and severe. There was a copious expectoration of clear mucus, and of thick, yellow sputa. His pulse was quick and small, and rapid. The respirations were hurried.

On examining the chest, anteriorly, on the right side, in the infra-clavicular region, between the 2d and 3d ribs, a tympanitic sound on percussion, ut no *bruit de pot fêlé*; broncho-cavernous respiration well marked in same locality; elsewhere, in same region, bronchial respiration; on left side, same region, broncho-vesicular respiration. Greater expansive movement of *left side*, most marked in infra-clavicular region.

CASE V. *Pulmonary Tuberculosis affecting one side much more than the other; Bulbous Enlargement of the Finger-ends; Broncho-cavernous Respiration; Stage of Excavation.*

October 24, 1857. P. C., aged 16, laborer, has been in the hospital since the 23d of last May.

The *previous history* is as follows:

None of his immediate relatives have died of tuberculosis. Up to February last, enjoyed tolerable health: during the winter, however, he had a cold, and noticed that he was losing flesh. Had no attack of hæmoptysis up to period of admission. Kept at work, being much exposed to the cold. Took to the bed in February last, on account of pain in the right side of chest, accompanied by cough and expectoration. Since his admission has had one attack of hæmoptysis.

Present Condition. Considerable emaciation; profuse night-sweats. Cough frequent; expectoration copious and muco-purulent; has not much pain in the chest. Skin warm; respirations 20; pulse 80. Appetite fair; no diarrhoea; bowels regular. Feels very weak, and suffers from shortness of breath. Fingers and toes clubbed at their ends with curved nails.

Nov. 22d, Physical Examination of the Chest. The left side presents notably greater expansion on forced breathing. The right side, in front, gives no vesicular resonance on percussion, whilst this quality of sound is sufficiently marked on the left side. The resonance, in front, at upper third, on the right side, is tympanitic. In the 2d intercostal space, on the right side, the respiration is *broncho-cavernous*, and on percussion, a well-marked *bruit de pot fêlé*; no *pectoriloquy*, but at right summit bronchophony is marked, &c.

January 26th, 1858. This patient has been taking cough syrup and milk punch. He has been up, frequently, in the afternoon. He has a copious expectoration. His appearance is materially improved since last Octo-

ber. There are no night-sweats, now. His strength does not appear to be failing; and the *emaciation* is not marked.

CASE VI. *Pulmonary Tuberculosis: Intense Bronchial Respiration; Remarkable effects of Treatment.*

November 3d, 1856, P. C., Irish, aged 51 years, laborer; admitted October 27th.

Previous History. Considered himself perfectly well up to March last. His father died with phthisis, and his brothers have been subject to it. Was suddenly attacked, after exposure to cold and wet, with a sharp pain in the left side of chest, accompanied by cough. This cough, he says, he has had for some years, but has paid no attention to it. The next day, he observed a slight expectoration. He took to the bed, and kept it most of the time, until he came to the hospital in May last. His cough grew more and more severe. The expectoration became much more copious, thick, yellow, and foetid. The pain in the left side continued more or less severe. He was obliged to lie on the right side. Grew weaker, lost considerable flesh, and had profuse perspiration at night.

Remained in the hospital about two weeks; he was much improved in strength, and the pain was relieved; the cough and expectoration diminished. He was able to get out of bed, and walk about the ward. He left the hospital; and soon the cough and expectoration and pain returned. Was obliged to take to the bed; continued to lose strength and flesh. And entered the hospital in the latter part of October.

When first seen, was extremely prostrated. Face was pallid; there was profuse perspiration; he could lie only on the left side. The pulse small, and 100 per minute. Respirations 32. The cough frequent and severe: the expectoration very abundant and extremely offensive, consisting of thick yellow sputa; he had expectorated about a pint in the twenty-four hours. He complained of severe, stitch-like pain in the right side, increased by forced respiration.

He was placed on the use of brandy: and has improved materially.

Nov. 8th, *Chest examined to-day.* Dullness, amounting nearly to flatness, over whole of left side, anteriorly, laterally, and posteriorly: clear, *resicular* resonance on right side. Intense bronchial respiration, every on the left side, in front, laterally, and behind. *Bronchophony* is intense every

where on the same side; the whispering souffle also is intense, and near the ear, every where on left side. On the right side, the vesicular murmur is well evolved; with a sonorous râle occasionally, both at the summit and at the base. At the summit, in front, a prolonged and high pitched expiration is heard, over middle of infraclavicular region. The right side expands somewhat more on forced breathing than the left.

Nov. 16th. This patient is improving: his aspect is better. The expectoration is copious, and of same appearance as heretofore, but has lost its foetid odor.

He is taking half a pint of brandy in the twenty-four hours, with cough syrup: the diet is sustaining.

Nov. 22d. This patient sat up about an hour yesterday. The treatment now consists of

Cod liver oil f. $\frac{3}{4}$ ss, 3 times,
Brandy f. $\frac{3}{4}$ ss, every two hours, and
Cough syrup f. $\frac{3}{4}$ i., every two hours,

and sustaining diet.

Jan. 7th, 1857. The patient has continued on the above treatment with the exception of morphia, grain $1\frac{1}{4}$, in place of the cough syrup: this medicine has gradually been increased, until he is taking now two grains at bed time. His aspect is much better. He enjoys refreshing sleep at night. The cough is less frequent: and the expectoration is diminished in quantity and not offensive; the characters continue the same. His appetite has been fair: he has had two attacks of diarrhoea lately.

February 1st. On examining the chest, this morning, the same physical signs were observed as at the last record. But in the upper scapular and upper part of the inter-scapular regions, the quality of respiration was *broncho-cavernous*. On the right side, over and below the scapular, the respiration is broncho-vesicular. On the left side, the sound on percussion, is tympanic; but no distinct *bruit de pot fêlé*.

This patient presented a very much better condition on May 2d, (the termination of the winter service,) than when admitted. He terminated his life, on the night of the 10th of July, 1857, by his own hands, during temporary aberration of mind.

CASE VII. *Pulmonary Tuberculosis; Slow or Non-progressive; Broncho-Cavernous Respiration; Effect of Hygienic Measures and of Treatment.*

December 7th, 1856. B. D., Irish, aged 30, laborer.

Previous History. States that he has had repeated attack of intermittent fever within the past four years. He noticed cough first in January, 1855, and suffered from stitch-like pains at the summit of the left side of the chest. During the winter, he expectorated considerable; and sometimes had hæmoptysis. At no time was he confined to bed. Kept at work most all the time, occasionally losing a day or so. The cough continued until the following May. Is not aware that he lost any flesh. From May, 1854, to February, 1856, was free from cough; considered himself well; and worked steadily. Began to cough again in February, 1856. And in March and April, was occasionally obliged to keep the bed. He never had any medical attendance, nor did he take any medicine prior to entering the hospital. Last May he was bled by some one to whom he applied. Continued to work, more or less, during the summer. Has been accustomed to the use of whisky. He thinks that he has not lost any weight within the past two years.

Present Symptoms. Aspect not unhealthy; he is not emaciated. He states that he feels strong and able to work, but he suffers from shortness of breath, and from stitch-like pains at the summit of the left side. Appetite good: bowels are regular: occasionally, has had attacks of diarrhoea. The cough is frequent: the expectoration is moderate in amount. Respirations 20. Pulse 84.

Was placed on the use of cod liver oil.

December 13th. Cough and expectoration diminished. Feels able to return to work; and leaves the hospital to-day.

Prior to his departure, the following physical signs existed, on examination of the chest:

Slight lateral spinal curvature, to right side. More expansion of chest, on right side, above, and anteriorly; greater elevation of right scapula: more marked on forced breathing.

On percussion, in front, on left side, in supra and infra-clavicular regions, high pitched and tympanitic resonance. At left summit, in front, no respiratory murmur, except at acromial extremity of clavicle, where it is broncho-

vesicular. On right side, at summit, in front, respiration vesicular and well evolved.

Reëntered the hospital on the 14th of October. States that he has been at work ever since leaving the hospital. The cough and expectoration have continued ever since; and he has some hoarseness of voice. Feels weaker than when he left the hospital.

He has had night-sweats, and has lost considerable in weight during the summer. Has suffered more or less from the stitch-like pain in left side of chest. Now he is able to be up all day and out of doors; but feels too weak to work. Finds himself short of breath on exercise.

His appetite is good: but has had frequent attacks of diarrhoea during the past summer. Pulse 100. Respirations 20.

Complains, now, most of pain in the left side of the chest: cough, expectoration, and night sweats continue; he is somewhat emaciated. Otherwise, he is in much the same condition that he was last winter.

The treatment is to consist of cough syrup, cod liver oil, and morphia at night.

Nov. 30th. Examination of Chest. Marked depression at the left summit in front. Less expansive movement on left side, in front, in infra-clavicular region: and less elevation of left scapula, on forced breathing. Great dullness at upper and middle thirds, in front and behind, on left side: in front, this is of a tympanitic quality. On right side, vesicular resonance in front and behind. On same side, inspiratory sound vesicular, without any expiratory sound. On left side, in front, at the summit, *broncho-cavernous* respiration. Behind, on same side, respiratory murmur obscured by bronchial râles.

December 13th. Patient had an attack of hæmoptysis last night, inconsiderable in amount. It is now four-teen months since the last attack.

His general appearance is better than when he entered the institution. Is up the entire day, and able to be out of doors. His voice is not as husky as when he entered.

He is taking now:

Cod liver oil, milk punch, morphia, grain $\frac{1}{4}$ at night; and he is on the use of a sustaining diet.

CASE VIII. Pulmonary Tuberculosis; Broncho-Cavernous Respiration; Slowly Progressive; Effects of Treatment.

March 1st, 1857. E. H., Irish, aged 55, laborer.

Previous to six years ago, considered himself perfectly well. During the winter of 1851 and '52, noticed a cough, accompanied by slight expectoration; about two months after this, was attacked with hæmoptysis; expectorated the first time less than a teaspoonful. Did not suffer from any pain in the chest. Lost a little in weight. In the following spring, felt much better; the cough and expectoration disappeared. Kept at work all the time. During the winter of 1851 and '52 had, at the least, half a dozen attacks of hemorrhage from the lungs.

From the spring of 1852 to the winter of 1856, over four years, he seems to have been free from any pulmonary symptoms. But on the approach of that winter, the cough and expectoration returned. There has been no return of the hæmoptysis. He has had night-sweats. Has lost considerable in weight during past winter. Has suffered from pains in the chest, but none at the summit.

Now, his aspect is pallid: there is some emaciation; has most cough and expectoration in the morning; the latter is not copious, and consists of opaque, yellow sputa, with some transparent mucus. Perspires at night. The appetite is good: bowels costive. Respirations 16, and pulse 76.

Physical Examination. Right side, at summit, flattened; superior costal movement greater on the left side. On percussion, distinct relative dullness on right side, at the summit, in front, and over scapula, behind. On the right side, every where, sonorous and sibilant râles, more or less constantly present, but not intense. Occasionally, at left summit, a feeble sonorous râle with the expiration; local resonance greater on the right side.

The treatment consisted of:

Cod liver oil f. $\frac{3}{4}$ ss, 3 times,

Cough syrup; and regulated diet.

May 1st. Patient remains in about the same condition.

October 4th. Since last May, has not been confined to bed all the time; has been in bed, now, about three weeks. He has lost some in weight, and is much weaker. Has suffered from shortness of breath. Has not had much pain in the chest. During the past summer, has expectorated blood several times. He has had but little cough and expectoration. Has not perspired at night lately. Appetite continues good; the bowels are regular; and there has been no diarrhoea. Pulse 100. Respirations 24.

On examination of the chest, the physical signs showed no great extension of the disease on the right side; but on the left, the disease had pro-

ceeded to the formation of excavations, as proved by the marked tympanitic resonance on percussion, and more especially by the presence of the *broncho-cavernous* respiration on the left side, at summit.

He is placed on the use of:

Whisky, cough syrup, and occasionally cod liver oil.

January 26th, 1858. His general appearance has materially improved. His cough and expectoration have been slight during the winter. He has never complained of pain in the chest. He has had no attacks of hæmoptysis. His mind has been composed: and generally, he has been sleeping at the time of the daily visits. He has been up and dressed several times this winter.

ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association*

TUESDAY EVENING, Feb. 16, 1857.

The regular meeting of the society on the first Tuesday in February was adjourned to Wednesday evening.

February 10th. Owing to the death of one of its most respected members, Dr. Lewis, the meeting was adjourned to date.

The association met.

Present—The President, Prof. Flint, in the chair; and Drs. Newman Gay, Wilcox, White, Miner, Lemon, Rochester, Whitney, Nichols, Flint, Jr., Treat, Hamilton, Wyckoff and Rankin.

A reading of the minutes of the last meeting was called for, but as they were not present, it was dispensed with.

The committee on Puerperal Convulsions was prepared to report, but the reading was deferred until later in the evening.

Dr. Rochester, committee on Tracheotomy in Membranous Croup, asked further time, which, on motion, was granted.

Prof. White exhibited specimens of growths which he had removed from the interior of the uterus. The patient was a married female, aged about 40 years, who had never borne children. She had been affected with a continual and exhausting hemorrhage from the uterus for a long time. On a careful examination with the speculum, there was discovered a small uterine polypus about the size of a bean: this was removed, and the patient assured of recovery; the after treatment consisting of astringent injections with the internal use of ferruginous tonics. Under this treatment the patient improved, but a discharge continued, being about one-half as copious as before the

removal of the polypus. A specular examination discovered nothing at the mouth of the uterus; but its cavity was found to be enlarged and the lining membrane roughened, by an exploration with the uterine sound. Iodine was passed up into the cavity, but without any effect on the discharge; and careful examination revealed vegetations or polypoid growths from the mucous membrane. Dr. White determined to remove these with Recamier's instrument, which he had before used with success for a similar purpose; (this instrument is merely a scoop, of a size sufficiently small to admit of its introduction into the uterus,) he accordingly passed it into the cavity of the organ, and thoroughly scraped its internal surface, removing a number of excrescences, varying in size from that of an apple seed to a millet seed. These came away easily, and it is probable that they were all removed. This succeeded in entirely arresting the hemorrhage.

A specimen of these excrescences was examined microscopically by Dr. Flint, Jr., who found them to consist of the uterine mucous membrane with some areolar tissue.

Dr. White added, that in his opinion, these excrescences often existed in cases of uterine hemorrhage, and that the best means of arresting it, was the removal of the growths by means of Recamier's instrument.

Dr. Rochester enquired if any topical application was to be made after the operation.

Dr. White replied that he applied the muriated tincture of iron. The operation is not attended with much hemorrhage, and there did not seem much liability to return. The discharge was not continually sanguinolent, but when it did not consist of blood, it was watery and not purulent. Dr. White has no doubt but these growths are analogous in their character to ordinary uterine polypi. In making topical applications to the interior of the uterus, Dr. W. uses a bit of lint, attached to a piece of whalebone, or grasped by a pair of long forceps, saturated with the requisite fluid. He prefers this method to injection into the body, as he has seen cases where these injections were followed by most intense abdominal pain, even so severe as to cause a suspicion of peritonitis; the fluid might indeed have passed through the fallopian tubes into the peritoneal sac. He had repeatedly arrested obstinate uterine hemorrhage by passing up a doosil of lint saturated with the muriated tincture of iron.

Dr. Treat mentioned the practice followed by Prof. Miller in such cases, which consists in passing up a strip of linen saturated with some astringent fluid, with a probe, and allowing it to remain.

Dr. Rochester remarked that he had always been unable to pass the strip

sufficiently far into the cavity of the uterus, while he could always make applications in the method mentioned by Dr. White, with great facility.

Dr. White thought, that in passing up a strip of cloth, in the manner recommended by Dr. Miller, most of the fluid would be squeezed out in passing it through the os uteri.

Dr. Rochester presented an account of a case of supposed Pyæmia.

Report of a Case of Supposed Pyæmia.

On Monday, Feb. 1st, Dr. M. G. L., of Black Rock, was exposed to a cold and piercing wind for a long time. On reaching home he was chilled through. The following day, Feb. 2d, he was confined to the house, but not to his room.

Wednesday, Feb. 4. He was still more ill, and had two distinct rigors, followed by imperfect reaction; he also experienced sharp pain in the left scapular region and left arm, which was aggravated by motion. He took eight grains of calomel with ten of rhubarb, which operated freely.

Thursday, Feb. 4th. At his request I visited him about noon. He was lying upon his right side, and could neither move nor be moved without suffering excruciating pain. With much care and difficulty his clothing was sufficiently removed to afford a view of the back. A distinct swelling, extending from the left upper scapular to the left lumbar region, was apparent. There was no redness of the skin. Palpation of the swollen parts was impracticable, on account of the excessive agony induced by the slightest manipulation. When perfectly quiet there was no pain, nor was it produced by a full inspiration. It appeared to be confined to the integument. Physical exploration, carefully conducted, afforded no indications of intrathoracic disease.

General Symptoms. Surface sallow, especially that of the face, dry and evincing slight febrile movement; lips and nails somewhat livid; gums pale, spongy, and bleeding on slight pressure; (the Doctor attributed the state of the gums to the mercurial he had taken the night before, as he was unusually susceptible to its action,) tongue moist, edges and tip pale, centre and posterior thickly furred. Tonsils and fauces pale, flabby, and covered with a white, tenacious, frothy mucus. From one nostril there was a slight discharge of a muco-sanguinolent fluid: this had been observed at intervals for several weeks.

Pulse 120, and very feeble. Thirst present, but not urgent; no appetite; urine normal.

History. Health good until August last, when he had an attack of dysentery, which he attributed to an impure cistern near his sleeping apartment. This was succeeded by a low form of intermittent fever, which was again followed by dysentery. He was visited in this illness by Prof. Flint. Dating from this period, he has never been entirely well, being frequently annoyed with flatulencia, colic pains, and diarrhoea. He has likewise had tonsillitis, sore and swollen lips, offensive breath, and enlargement of the cervical glands. Early in October he suffered from severe and obstinate furuncular inflammation of the nose and upper lip, attended with spontaneous salivation, which continued for nearly a month. Two weeks ago he lost his only child with measles: it was ill for ten days, and during its sickness, the father was its constant and untiring nurse.

The death of the infant was a severe blow, but notwithstanding the consequent mental depression, and the physical weakness induced by anxiety and sleepless nights, he returned to his professional avocations, in which he was busily engaged when attacked by his last illness.

Diagnosis. The pain and swelling in the back directed especial attention to that locality, and in my first interview, fear was expressed that it indicated deep seated muscular abscess, but on account of the extreme sensibility of the skin, it was hoped that an herpetic, or erythematous eruption, would soon appear, and relieve and explain the excessive local tenderness. The constitutional symptoms could readily be attributed to the sharpness of the attack, considering the preceding ill health, and recent affliction of the Doctor.

If there was doubt, however, respecting the diagnosis, there was none as to the requisite treatment. Warm laudanum, covered with a hot fomentation, was directed as a local application, and the following prescription was made:

R: Quinise sulph. grs. ij.
Pul. Doveri, grs. vj.
Camphoræ gr. ss.

To be repeated every three hours. Also to take beef essence and other nourishment freely.

Feb. 5th, 11½ A. M. Local tenderness not abated. General condition improved. Pulse 100. Surface moist; has had a quiet night, and perspired freely. Arm less painful, and not at all swollen, but the pressure even of a feather upon the back could not be tolerated. Abdomen tympanitic, much flatulencia, but no griping, and no stool. Urinary secretion abundant. Di-

ected general treatment continued, and, as a local anæsthetic, the vapor of carbonic acid.

Feb. 6th, 9 A. M. General aspect improved; local tenderness and swelling diminished, but not sufficiently to allow manipulation. Pulse, however, more frequent, (116) and feeble. Ringing in the ears, and slight deafness. This was attributed to the quinine, of which he had now taken about forty grains.

Directed: Tr. iodini comp. locally, and the quinine; Dover's and camphor powders to be taken every six hours; beef essence and strong milk punch, *ad libitum*. Also, at the Doctor's request, one seidlitz powder.

I was unable to make another visit in the afternoon, being occupied with a severe case of uterine hæmorrhage.

Feb. 7th, 10½ A. M. Has passed a bad night. The bowels have moved copiously five or six times, as the Doctor supposed from the seidlitz powder, of which he took but half. Pulse 120, and very feeble; surface moist and cadaveric; lips swollen and livid. Local tenderness and swelling much less. Distinct fluctuation on palpation. The Doctor had taken twelve grains of Dover's powder, with the effect, as he thought, of controlling the hypercatharsis.

Directed a warm poultice to the swollen part, and to take beef essence and brandy very freely, and in case of a return of the diarrhœa, ʒ s. of paregoric.

10 P. M. Prof. White in consultation. Patient much worse, has had very copious colligative diarrhœa throughout the day; has refused stimulants and nourishment. Pulse very feeble and intermittent; skin cool and clammy. Mind wandering, with lucid intervals. Local tenderness very much lessened.

Prof. White concurred with me as to fluctuation on pressure, and also as to the probability of purulent absorption, from the gravity of the general symptoms.

Stimulants and nourishment were directed to be pushed. Brandy ʒ s. and beef essence ʒ s. every half hour, if the stomach would tolerate them. Also enemata of starch with ʒj. of laudanum, and ten grains of tannin after each evacuation. Also morphine in half grain doses by the mouth, if the injections should not restrain the stools. These directions were faithfully carried out by Dr. Sylvester Rankin, who remained with Dr. L. during the remainder of his life.

Feb. 8th, 4¼ A. M. Prof. Flint in consultation. Patient rapidly failing. Stools very frequent and involuntary.

Stimulants and morphine continued.

9 A. M. Sinking.

4½ P. M. Died.

Autopsy, 23 hours post mortem.

Present—Drs. Flint, Wilcox, Newman, Wyckoff and Rankin.

It should be noted that this post mortem examination was made at the request of the patient.

Cadaveric rigidity slight; skin sallow. Posterior portion of the body very dark from sanguinolent imbibition: this was observed several hours before death.

Sectio Cadaveris. Conducted by Dr. A. W. Nichols. Two deep incisions, crossing each other at right angles, were made in the left scapular region, *No pus* was detected, but the whole muscular tissue was softened and infiltrated with a sero-sanguinolent gelatinous fluid.

Head. Not examined.

Thorax. Left lung, one or two chalky concretions in the apex, marked *hypostatic congestion* of posterior portion; otherwise healthy. Right lung, adhesions from old pleurisy; in all other respects corresponding with the left lung.

Pericardium. Contained about an ounce of serum.

Heart. Amount of fatty deposit rather large, especially at apex; walls of left ventricle three quarters of an inch thick; central cavity small. (Prof. Flint thought this might possibly be due to concentric hypertrophy.) Valves normal.

Liver. Slightly enlarged; healthy.

Spleen. About three times the usual size, and a little softer than common.

Kidneys. No morbid changes.

Neither the stomach, bowels or mesenteric glands presented any evidences of disease.

Blood. Unusually fluid.

The lateness of the hour, and other circumstances, precluded an examination of the joint cavities, and other portions of the body.

Remarks. Pathologists recognise two distinct forms of pyæmia. The one *primitive*, originating in the blood itself, the other *secondary*, resulting from absorption of purulent matter. The first form is the more surely and rapidly fatal, producing necræmia, and consequent destruction of life, the morbid changes being mostly confined to the circulating fluid. Purulent depots

are not always found in either variety, and rarely, in fact, in primitive pyæmia. When not detected elsewhere, they are often discovered in the joint cavities, especially in those of the knee and shoulder.

In the case reported, neither the contents of the cranium, nor of the joint cavities were examined; it cannot, therefore, be said that there were no pus depôts: but even had these *not been* detected after a *complete and critical* examination, the absence of disease in the vital organs, sufficient to account for the symptoms presented during life, would strengthen the idea, and as far as negative evidence can go, establish the diagnosis of pyæmia. The condition, as found in the muscular structures of the left scapular region, would doubtless have eventuated in abscess, had the patient possessed more vigor, and by this channel the blood poison might have been eliminated. Taking into consideration the history of the case, the writer is inclined to trace the source of the pyæmia to the dysenteric attack in August last. This it will be remembered was followed by "a low form of intermittent fever." Prof. Flint, who visited Dr. L. in this illness, informs me that "it was not a frank, well defined intermittent."

Hepatic abscess is recognised as an occasional sequence of dysentery. On the cessation of the fever, dysentery again appeared, and it may be that its second occurrence was a natural effort, partially successful, to remove pus from the liver, or other parts of the system (vid. Rokitsansky *infra*.) Succeeding the dysentery, we have constant ill health, colicky pain, flatulence, diarrhoea, sallow countenance, tonsillitis, enlargement of cervical glands, fungular inflammation of lip and nose, ichorous discharge from nostril, spontaneous salivation, and other evidences of a broken down constitution; lastly great mental and physical depression, and a fatal crisis at length evolved, immediately induced by long exposure to inclement weather. A few quotations from Rokitsansky, in relation to pyæmia, and bearing upon the case reported, will close this paper. The *italics* are introduced as substantiating some of the views expressed above:

"Pyæmia—Pus Blood."

"This crisis represents a *local pus production*, and also a *spontaneous primitive pyæmia* of the entire blood mass."

"The more intense the aggravation of the crasis, the less do we encounter the aforesaid depôts." * * * "In the *highest grade* extensive passive stases affect the decomposed blood, producing necrosis, with dark and *hemorrhagic imbibition* of the textures." * * *

"The *lungs* are the especial seat of hypostatic congestion, with a dark coloration, verging upon cherry red or upon brown." * * * "It is certain that a large proportion of bland pus, taken up into the circulation, proves far less mischievous than an incomparably smaller quantity of *purulent ichor*." * * * "Pyæmia generally proves fatal." * * * Inconsiderable grades of it, however, are susceptible of cure. This occurs, without doubt, partly through a conversion of the pus analagous to the metamorphosis of fibrin—partly through the elimination of the pus in *exudatory processes*, especially upon extensive mucous membranes like that of the *intestinal tract*."

To the above may be added, from Valleix, in the article entitled "*Infection Purulente*":

"In very grave cases there has been a *yellow tint of the skin*, which has some analogy with icterus, and to which M. Maréchal attached great importance."

In reply to Prof. White's inquiry, as to the analogy of the present case with that of Dr. J. Kearney Rodgers, reported by Dr. Hosack, the writer has observed many resemblances. Dr. Rodgers was indisposed for several months preceding his last illness, suffering from diarrhoea and colicky pains. At last he was taken severely ill with what he and all his attending physicians, except Dr. Hosack, supposed to be intermittent fever. He had rigors, yellow skin, feeble and frequent pulse, with surface sometimes dry, but generally moist. A post mortem examination, conducted by Dr. Isaacs, revealed lymph and pus in the abdominal cavity, the liver was unchanged in external appearance, but on section minute drops of pus exuded from the cut surfaces. These were found to proceed from the ramifications of the portal vein. Pus was also found in the mesenteric veins. Dr. Rodger's illness was more protracted than Dr. L.'s: he lived just one month after the severe symptoms were declared. Had his disease been of shorter duration, pus might not have been detected.

Prof. White remarked that he had no doubt as regards the swelling mentioned by Dr. Rochester, that it was not an abscess; he thought that it was the second form of pyæmia mentioned by Rokitansky; he did not consider that there was sufficient vitality in the system for the formation of pus: it seemed to him that the symptoms could be accounted for in this manner.

Dr. Gay said that he had expressed an opinion with respect to this case, that the disease was erysipelas. Dr. G. had three cases of this disease, in

which the symptoms were much the same as in the case reported by Dr. Rochester. Since the reading of a full report of the case, however, he was disposed to agree with Dr. Rochester in the diagnosis; his cases occurred during an epidemic and between them and the one reported, there were many points of similarity; if this case were one of pyæmia, it was possible that his cases were of a like character. Dr. Gay gave a brief account of some of the symptoms in the cases to which he referred.

Prof. Rochester thought that the cases mentioned by Dr. Gay were cases of erysipelas, but that his case was of a different character, as shown by decided changes in the blood, which were indicated by many of the symptoms.

Dr. Gay inquired if the absorption of pus would produce delirium and death so speedily.

Prof. White answered that it would, as was abundantly shown in some forms of puerperal fever, which were dependent on the absorption of matter. The idea that the disease, in the case of Dr. Lewis, was erysipelas, had never occurred to him; there was no disease of that kind in the vicinity. There is no disease, in the opinion of Dr. W., which is so rapidly fatal as pyæmia.

Prof. Hamilton remarked, that as a rule, the physicians in attendance were most able to judge of the nature of a disease; that his knowledge of the attainments and skill of the attending physicians in this case, was such as to inspire him with the most implicit confidence in the correctness of the diagnosis; he does not see, from the report, what other conclusion could be arrived at. Dr. Hamilton mentioned a case which had come under his own observation, in which he had removed the penis for epithelial cancer. The wound had nearly healed, when the disease was reproduced in the stump. He then made a second operation, removing the entire organ; for two or three days the wound did well, discharging healthy pus, when on the fourth day, the suppuration changed in its character, the patient became very much depressed, had severe chills, and an approach to coma; he died on the third day after this change. A post-mortem examination was denied, but Dr. H. had no doubt that death resulted from purulent absorption.

Prof. Flint remarked that the case of Dr. Lewis was undoubtedly one of pyæmia, though it might seem at first to admit of discussion. In regard to Dr. Gay's cases, it would seem more reasonable to regard them as cases of erysipelas. Still the analagous symptoms in the cases might be explained by the fact that cases of malignant erysipelas often involve pyæmia, which would give rise to the symptoms described by Dr. Gay. Dr. F. thought that it was probable that pus-blood occurred in the cases mentioned

by Dr. Gay, in connection with the attack of erysipelas. The pathology would be the same as in the cases of child-bed fever mentioned by Dr. White.

While in London Prof. F. attended a post-mortem examination by Prof. Jenner, the details of which we quote from his note book: "Dr. Jenner invited me to attend a post-mortem examination at the hospital, in an interesting case which was admitted into the surgical ward for prolapsus ani. After his admission he presented febrile movement and delirium, and the case was transferred to the medical ward as a case of typhus fever. Dr. J. said he had considered the case to be one of *pyæmia*. He said it had happened several times to him to see cases of *pyæmia* which had been called typhus; and a gentleman connected with the surgical side of the hospital said that patients with *pyæmia* were not unfrequently admitted as cases of rheumatism. Dr. J. told me that the pulse in this case was very frequent. I asked him if he would not consider a case probably one of *pyæmia*, in which the pulse was very frequent, the patient prostrated and in an alarming state, the disease not being fever, nor the symptoms otherwise accountable? He replied in the affirmative.

"When I arrived at the post-mortem room—the same in which I had met Dr. Walshe—I found he was just finishing the examination of the heart, and this was the first organ examined. He dictated notes recorded by an assistant, in the same mode as was pursued by Dr. Walshe. He measured the width of the aorta and pulmonary arteries just above the valves, and the length of the base of the mitral and tricuspid valves, opening the ventricles freely for that purpose. The heart was normal.

"The right and left lungs were then successively removed and examined. Nothing found but congestion, some sub-serous ecchymoses and a few small calculi just beneath the pleura.

"Head next opened; nothing especially abnormal found; appearances noted in full; no special pains taken to observe arachnoid effusion. Dr. J. looked into the base of the skull after the brain was removed and detected 'about the usual quantity of arachnoid effusion.'

"Liver presented nothing abnormal, nor the spleen or kidneys. The intestines (ileum) presented visible Peyer's glands, and some submucous extravasation in spots."

Where were the evidences of the correctness of the diagnosis?

Dr. J. opened the knee-joints, and in the right joint was found a considerable quantity of purulent looking matter. The membrane was injected. He opened the ankle, wrist, elbow, shoulder and hip joints. A little purulent

fluid was found in the cellular tissue about one elbow joint, and a small quantity, either within, or in the neighborhood of one of the hip joints.

This was considered sufficient to settle the diagnosis—for it is evident the patient did not die from the joint affection. The latter, then, were only results of some more general disease—the blood disease—but “suppose,” said Dr. Jenner, “we had not found the purulent collection? I would have been equally satisfied that the patient died with pyæmia, but could not have satisfied others to that effect.”

Dr. Flint had met with cases in females after labor, and cases disconnected with labor, which presented symptoms of pyæmia.

Dr. Flint, Jr., read a report of a case of hydrophobia. The case was reported to the association by Dr. Baker, but the Dr. was unable to be present and requested Dr. F. to read the case for him.

Case of Hydrophobia.

About the first of October last, Charles Hoyt, aged 13 years, was bitten on the end of his nose by a dog. There were three cuts in the skin, which bled profusely. His father dressed the wound with adhesive plaster, and in a few days it was healed. Whether the animal was rabid or not is not known. Its owner said the dog was perfectly healthy and had never shown any symptoms of disease—rabies or other. But having bitten another lad a day or two after, he was killed. No anxiety seems to have been felt as to the result, and the circumstance had been forgotten by the family.

On Saturday, the 23d inst., Charles had fallen into the Creek and completely saturated his clothes with water. In this condition he kept around the streets, for some time posting bills, and finally, went into the house of an acquaintance, dried himself and went home. His family knew nothing of this until the day of his death. His health was good up to Wednesday night, the 27th inst. That night his grandfather occupied the bed with him, but could not sleep on account of his restlessness. Thursday morning, when called to breakfast, he declined eating, and said he had no appetite. As morning advanced, complained of headache and nausea. Toward noon vomited freely several times, a greenish bitter matter. Most of this day was confined to bed. Toward evening his mother gave him a dose of laxative bitters, of domestic manufacture. During the night he was more restless and complained of his head; was quite thirsty, but did not like to drink as it “took his breath away.” His difficulty of swallowing arose not from any soreness of the throat, but a fear that it would suffocate him.

About 1 o'clock Friday morning, his medicine acted on the bowels, and he appeared somewhat relieved, and slept for two or three hours. When he awoke his headache had left, but he had a high fever, which lasted through the day; would call frequently for drink, which he took from a spoon; said he could n't drink from a cup or tumbler, "it took away his breath." A part of the night of Thursday and during Friday, would rouse with a start and scream, and appear frightened as though something was after him. Friday afternoon these symptoms increased in severity, and any sudden or unexpected motion made near him, would cause him to jump or spring with a cry of alarm. About 4, P. M., of Friday, he was sitting in a chair near the stove, when an elder brother came up behind him, and lifted a corner of the blanket to cover his legs; he sprang from his seat and fell to the floor, insisting that his brother threw him out of the chair.

At 5 o'clock, P. M., of this day, the 29th, Dr. Lockwood saw him gave him a large dose of calomel, and directed a tea of wormwood for drink. The calomel acted freely as cathartic and emetic. He threw up large quantities of bilious matter. He was more quiet after the operation of the medicine. Previous to the operation of the calomel his symptoms were much the same.

Saturday morning he was thought to be much better; was quiet and cheerful; partook of a little coffee and toast water. There was less difficulty in deglutition, though he had yet to take his drinks from a spoon. Towards noon of this day, 30th, began to manifest more wildness and incoherence; would suddenly jump from side to side of his bed. He said he did this to "catch his breath" which was getting away from him. Was almost constantly spitting and wiping his tongue and lips. His family had noticed, for two or three weeks, a habit of frequent spitting.

At 3 o'clock, P. M., I first saw him. An hour before had a severe chill, but now his skin was warm and moist; countenance wild and anxious; motions quick and jerking; his arms folded tightly across his chest. Complained of his heart hurting him, by thumping so hard. Considerable distress of stomach; larynx slightly sore, but did not hurt him in swallowing. Tongue but little coated; pulse nearly normal in force and frequency. Said his head did not ache. Olfactory nerves remarkably sensitive to odors of all kinds, especially previously favorite perfumery.

Prepared a weak solution of carb. ammonia, hoping it might relieve the distress of stomach, and directed warm fomentations to chest and bowels.

I suspected hydrophobia, but preferred seeing his medical attendant before prescribing. At my request, his father offered him a teaspoonful of

the solution, which he at first declined, saying: "I can't take it, it will choke me; it won't go down any further than this," placing a finger on the top of the sternum. After a little persuasion, he consented to try. Wiping his tongue violently two or three times with a cloth, he rose with a jerk to a sitting posture, saying, "let me get ready." Bracing himself, he suddenly opened his mouth very wide. As the spoon touched his tongue his lips closed on it, and instantly threw himself back on the pillow, panting as though he had been engaged in violent exercise.

Closely questioning his father regarding the boy's antecedents, I learned what has been related of the bite. There was to me no longer a doubt as to the diagnosis. I at once reported the case to Dr. L. with a request that he would resume the care of the patient. His engagements precluding this, he desired me to invite Dr. Flint to see him with me. At 5, P. M., Dr. F. and myself visited him. The spasms and glottis were now more frequent and severe. Would answer questions promptly and correctly. His general appearance much as when I saw him before. Pulse but little accelerated. Capillaries of skin much congested. Fauces and tonsils slightly inflamed.

At Dr. F.'s request, he took a teaspoonful of water, swallowing it rapidly with a jerk. The sight of water in a tumbler, and pouring it from the spoon neither excited nor disturbed him. To the questions, does it look good; would you like more of it? he promptly responded, no Sir. He kept his arms lightly folded across the chest, and almost constantly wiping his tongue and lips with each hand alternately.

Dr. F. coinciding in the diagnosis, it was decided to administer a teaspoonful of laudanum, to procure, if possible, an anodyne effect, and be guided in in subsequent treatment by the character of symptoms.

7½, P. M., Dr. Flint, Jr. and Mr. Mason, saw the patient with me. Had retained laudanum in the stomach about half an hour, when he vomited freely. Had taken some nourishment, which was also immediately thrown up. The spasms were less severe, though very restless, tossing about constantly. Perspired freely; his shirt was thoroughly wet with it. Pulse had changed to a wiry, frequent pulsation, striking about 120. It was impossible to time it exactly.

Directed a half teaspoonful of laudanum to be repeated at once if rejected. To administer nourishment and stimulants if he would take them. Within an hour, two doses were given and both rejected. His stomach would retain nothing.

9, P. M. Mr. Mason, Drs. Cushing and Stevens, at request of Dr. Flint

and myself, attempted to administer chloroform by inhalation. To this the patient obstinately and peremptorily objected. He did n't like the smell. They wanted to poison and kill him.

By main force one or two inspirations were received by him, but without perceptible effect.

10, P. M. Dr. F. and myself again visited patient. Symptoms had rapidly progressed. Presented the same wild appearance. Thoughts more incoherent, and he was quiet hardly an instant, throwing himself from one position to another. Secretion of saliva more abundant, and was very troublesome to him. Pulse at wrist not perceptible. Skin cold, and covered with a clammy perspiration. Respiration quick, catching, and at times labored. It was evident that further efforts at medication were useless, and it was decided to watch the progress of the case, and if practicable, attempt the use of chloroform and stimulants, if he could swallow them. Mr. Mason, Drs. Cushing and Stevens kindly volunteered to remain, and the following is from the notes furnished by these gentlemen:

10½, P. M. Expression of countenance anxious; eyes wild and staring. Constant discharges of saliva; occasional vomiting of dark colored matter. Extremities cold; congestion of capillaries. Frequent spasmodic twitchings of the limbs and muscles of respiration. Sudden starting as though alarmed. Frequent interruption of breath and voice by spasmodic closure of the glottis. No pulse perceptible at wrist. Little or no difficulty in deglutition. Delirium. Frequently orders all or part of those present out of the room. Talks at times incoherently; addresses absent persons as though before him. Starts suddenly without apparent object. Suddenly approaching him will cause him to start in alarm. Complains of pain in his head and in his left arm, and especially in his neck, but without locating its seat. Senses all exalted; complains if anything perfumed is brought near him.

11, P. M. More quiet. Pulse at wrist perceptible, but feeble and very rapid. Has taken five teaspoonsful of milk punch, one-third brandy. Apply warm flannel to extremities. Constant spitting.

Jan. 31, midnight. No perceptible change, except dilatation of pupils not before observed.

Stimulants continued.

12½, A. M. Has just had a violent convulsion, lasted but a few moments, and followed by great difficulty in breathing. Each expiration accompanied with a groan. Occasional rattling in throat. Pulseless at wrist, and but slight impulse of heart perceptible. Pupils very much dilated and insensible to light.

12.40. Had another convulsion less severe. Has revived somewhat. Vomits occasionally matter like coffee grounds.

1, A. M. For the last twenty minutes has been sinking rapidly. No more convulsions or spasms. Pulsation of carotids just perceptible. Insensible to all external impressions. Small quantities of blood occasionally issue from corners of mouth.

1.20. Occasional slight spasm of glottis: otherwise no change.

1.35. Pulsation of carotids more distinct. A slight impulse can be detected at the wrist. Occasional spasm of glottis more marked.

1.40. Again vomited—matter like coffee grounds—ejected through mouth and nose.

Sank rapidly, and died at 1.45.

Dr. Flint, Jr., remarked that he had seen in the first number of the Pacific Medical Journal, a journal just commenced at San Francisco, a notice that "a man was cured of hydrophobia, in Italy, lately, by swallowing vinegar in mistake for a medicinal potion. A physician of Padua heard this, and tried the remedy on a patient. He gave him a pint of vinegar in the morning, and another at night, which cured him." *Dr. F., Jr.*, inquired if any members of the association had ever seen, heard of, or read of an analogous case, or a case of recovery from that disease.

Prof. Hamilton referred *Dr. F.* to the legislature of the state of New York, who purchased of John M. Crouse, of Hudson, for \$2000, a recipe for the cure of hydrophobia. The recipe consisted of the false tongue of a newly foaled colt, verdigris from copper of George IV, or if it is not possible to procure this, the copper of some of the later kings will do, etc.

This was accompanied by innumerable testimonials, cures, etc.

Case of a Primipara, aged fifteen years and nine months, delivered at full term, of twins, by the forceps, after having been about fifty hours in labor, Puerperal Convulsions having supervened; both infants living, and together with the mother, doing well. In the practice of *Dr. GOULD*. Operation by *Prof. WHITE*. Case attended and reported by *BENJ. HEATON LEMON, M. D.*, Assistant Accoucheur to the "Buffalo Lying-in and Foundling Hospital of the Sisters of Charity."

Maria Holland first menstruated at the age of fourteen; the catamenia last appeared in the latter part of May, 1857. She has had good health during gestation, with the exception of swelling of the lower extremities for the last three weeks, which disappeared entirely just previous to labor.

She was taken in the pains of labor Thursday afternoon, Feb. 4th, and attended by Dr. Austin Flint, Jr., at the request of Dr. Gould, whose patient she was. No progress had been made, however, or was making.

Friday afternoon Dr. Gould saw her. Little progress; parts dry, and the os uteri rigid; exhibited nauseating doses of antimony.

At 7, P. M., I first saw her. Nausea was considerable, retching had occurred several times; the pains were frequent and apparently efficient; the mouth of the womb was dilated to about the size of half a dollar; the parts cool, moist, and soft.

The nurse was directed to give one more dose of antimony and report at 9 o'clock.

Attended again at 12, P. M. She had frequent, strong bearing down pains; the "os" was dilated to about the size of a dollar piece; the lips thin and membranous; the parts well lubricated and cool; considerable nausea.

Shortly after twelve the pains became less and less frequent and efficient, and at 1 o'clock, A. M., had ceased altogether; she slept till nearly 2 o'clock; on awaking she had a convulsion, followed in five minutes by another, more severe but shorter: scarcely ended, however, when another began. After an interval of three-quarters of an hour's rest, another convulsion; in five minutes more, another: these were of short duration. Chloroform was administered with the apparent effect of shortening and lessening the severity of the paroxysms. After an interval of 15 minutes, a sixth convulsion, which was followed by three-quarters of an hour's calm and sleep, from which she was awakened by a seventh convulsion, followed in ten minutes by an eighth, when she rested half an hour. Each of the preceding paroxysms lasted, about one and a half minutes by the watch. A fit of three minutes' duration succeeded this rest, not as severe, apparently, though of longer duration than the preceding ones. Two more convulsions recurred at an hour's interval.

From this time the patient was kept partially under the influence of chloroform.

She had twelve convulsions from 2 o'clock, A. M., up to 7, A. M. Between these hours she took two drachms of ergot infused in a pint of water. No perceptible effect was produced by it, however, being probably inert.

Under the partial influence of chloroform the patient remained passive, until the arrival of Prof. White and Dr. Newman, at half past 10, A. M.

Dr. White drew off a small quantity of urine; ruptured the membranes; advised cold to the head, one drop of croton oil to be given immediately, and the continuance of the chloroform as before.

Dr. Newman, on testing the urine, *found no albumen.*

Prof. White to return in two hours.

Shortly before twelve alight pains were manifested at intervals. Dr. White, on his return, pushed up the head in order that the waters might drain away with more facility. After this active labor set in, the pains being efficient and at regular intervals, so that by 2 o'clock, P. M., the vertex presented at the "os-externum," when the contractions again ceased, and the patient lay passive till half-past two, when a convulsion succeeded.

Prof. White being again apprised, returned at half-past 3, P. M., and delivered her under chloroform, with the forceps, of a live female child by the head; shortly after, with his hands, of an asphyxiated female child, the feet presenting. Ergot was given, the secundines soon followed, and the womb contracted well. An assistant was directed to keep his hand on the uterine tumor for two hours, to ensure its continuance.

The convulsions came on not so quickly but that the patient could give notice of it. They began first by severe pain in the head, then shaking of the extremities, and, finally, the whole body becoming violently convulsed, the head thrown back, the jaws champing on a cork covered with a rag, to protect the tongue; foaming at the mouth; the jaws towards the close of the fit becoming *set* on the cork; the eyes wide, staring, and strabismic.

The paroxysms would terminate with sobbing and gasping: a deep stupor would follow, with stertorous respiration for some minutes, when the patient would recover sufficiently to speak. Their average duration was about two minutes each, recurring at intervals of from five, ten, fifteen minutes, and an hour.

If chloroform was inhaled just previous to the access of the paroxysm, it would shorten and alleviate its severity if not prevent it entirely; little benefit seemed to be derived from it after the fit was on, respiration being partially suspended.

It may be worthy of remark, that in this case the convulsions twice supervened upon the cessation of labor pains; that the children were born alive, after the length of time in labor, with the addition of convulsions. Dr. White remarked that this was the third time he had delivered with the forceps during convulsions, the children living. With respect to the character of the paroxysms, he thought that although the works made three varieties, the hysterical, epileptic, and apoplectic, yet neither was identical with "*puerperal convulsions*," these having *distinct features as such*, and only to be described as *puerperal*, possessing as in the

above case, features of hysteria, of epilepsy, and of apoplexy, with other characters, which must be seen to be appreciated. That albuminuria and convulsions did not coëxist; no albumen being found either before or after delivery.

Prof. White related a singular occurrence in the case of a patient (in the family of an apothecary,) who was affected with erysipelas. Contrary to his custom, (the father being an apothecary,) he did not write his prescription. He ordered the external application of the tincture of iodine, and muriated tincture of iron internally. By a singular mistake the patient applied the muriated tincture of iron externally, which was followed by the most singularly happy effects on the disease. Dr. W. asked if any member of the association knew of a case of erysipelas treated by the external application of the muriated tinct. of iron?

Dr. Rochester had used it internally in such cases with good effects, but had never seen it applied to the skin.

It was moved and seconded, that owing to the lateness of the hour and the length of Dr. Newman's report, it be passed over for this evening and made the special business of the next meeting of the association.
Carried.

On motion, the association adjourned.

AUSTIN FLINT, JR., M. D.,
Secretary *pro tem*.

ART. III.—*Dislocation of the Femur upon the Dorsum Ilii. Reduction by Manipulation.* By FRANK H. HAMILTON, M. D., Buffalo, N. Y.

John Caswell, æt. 28, was at work, Jan. 7, 1858, at the bottom of a well; he was bent forwards, with his body at a right angle with his legs, when a large bucket, holding 500 weight of earth, fell upon his back and hips.

¶ [He was carried home and a physician was called, who, discovering the nature of his injury, declined to interfere, but directed him to the hospital. For some reason, not fully explained, he was not brought to the hospital until the 13th of January, six days after the accident. Until this time no attempt had been made to reduce the dislocation.

I found him a short, muscular man, with his left thigh dislocated upon the dorsum ilii. The whole limb was considerably swollen.

In presence of the class of medical students, and after having placed him moderately under the influence of chloroform, we proceeded to attempt the reduction.

I first flexed the leg upon the thigh, and then carried the knee towards the body, the thigh remaining in a state of adduction. When the flexion of the thigh upon the body was complete, I abducted and rotated the thigh outwards moderately, and then gradually brought both thigh and leg down to the table upon which he was lying.

The result showed that the effort was unsuccessful. The dislocation still continued as before.

I immediately proceeded to repeat the same manipulation, and with the same result, except that when the thigh began to descend, a sudden click indicated that the head of the femur had slipped off from the margin of the acetabulum, but that it had not fallen into it.

The chloroform was now suspended and the manipulations were repeated three times more, with only slight variations; but the reduction was not accomplished.

On the sixth trial the chloroform was resumed, and Dr. Cushing, who was present, made the manipulation. Instead of simply pressing the limb in various directions, at my instance, he stood over the patient and lifted or pulled upon the thigh at the same time that he flexed and abducted the limb. When the leg was brought down to the table the head of the femur was found to rest upon the foramen thyroideum; the thigh being forcibly abducted and rotated outwards.

Reversing the order of the movements I was able easily to restore the bone to its original position.

The seventh trial was made by myself in the same manner, with the preceding, except that when I supposed the head of the bone to be opposite the lower margin of the socket I did not permit the limb to turn either outwards or inwards, but while lifting at the knee with sufficient power to raise his hips from the table, I brought the leg down straight until the extension was complete. I did not feel any slipping or sensation of any kind as the limb was moved, but when the manœuvre was completed we found the bone had resumed its place.

We laid the patient in bed, upon his back, with his knees tied tightly together. No pain or inflammation of consequence followed. In two weeks he left the hospital. Whether he was then able to walk or not, I cannot say, but I think it very probable that he was.

ART. IV.—*A Case of Ancient Lateral Dislocation outward of the Radius and Ulna.* Presented to the Class at the Buffalo Medical College, Jan. 28th, 1858, by Prof. FRANK H. HAMILTON. Reported by W. H. MASON, Jr.

The following case is of such rare occurrence that it is deemed worthy of being placed upon record:

Francis Banfield, aged 22 years, a resident of Cuba, Alleghany county, on the 31st of September last, nearly four months since, fell from the sweep of a threshing machine to the ground, a distance of about five feet, striking upon the palm of his hand, his arm being extended in front of him. On rising he found his arm forcibly flexed and abducted. He straightened it without difficulty, and it assumed the position it now occupies. A physician was called and saw the patient an hour and a-half after the accident, who pronounced it a case of dislocation of the radius and ulna, and made efforts at reduction, which he continued from 8½, A. M. until 2, P. M., a period of five and a-half hours, to no purpose, when he abandoned the attempt.

During the attempt at reduction, the extension was made at times with the arm flexed, and at others extended.

At 9, P. M., another physician was called, who made efforts at reduction until 3, A. M., upwards of six hours, at which time he also abandoned the attempt.

On the third day another physician, the patient being under the influence of ether, made efforts at reduction for twenty minutes, when he pronounced it in place, and applied a bandage.

From the patient's account the arm was swollen to such an extent as to render this point difficult to determine.

On the fifth day the first physician was called, and believing that he discovered a grating, pronounced it a fracture of the external condyle.

The limb now presents the following appearances: Arm nearly straight; a moderate outward deflection of the forearm upon the arm, existing while the arm is at rest, which may be increased by the surgeon to an angle of 45°. The power of pronation and supination is nearly perfect.

The inner condyle projects an inch to the ulnar side; the head of the radius, completely removed from its socket, projects to an equal extent on the radial side. The top of the olecranon process is an inch higher than the top of the inner condyle, so that the radius and ulna are carried upward as well as inwards.

Prof. Hamilton remarked that in his opinion there was no fracture of

the external condyle. As in that case, the arm would be *permanently* deflected outward to a much greater extent. For although this arm may be deflected outward by the surgeon to an angle of 45° , still the degree of mobility which exists would be adverse to the supposition of its being a fracture of the external condyle. The condyles also can be plainly felt in their natural situations, which would not be the case, if a fracture of the external condyle existed. Prof. Hamilton advised that no farther attempts should be made at reduction.

ART. V.—*Lectures on the Diseases of Women.* By CHARLES WEST, M. D., Fellow of the Royal College of Physicians; Examiner in Midwifery, at the Royal College of Surgeons of England, &c., &c., &c. Part I, Diseases of the Uterus. Philadelphia: Blanchard & Lea. 1857.

This work of Dr. West is doubtless well known by this time to a great proportion of the profession, as it has been given to them in monthly instalments in the pages of the *Medical Library and News*, and now being completed in that serial, is given to the public in a neat volume of about three hundred and twenty pages.

The author is too well and too favorably known through his work on Diseases of Children, to stand in need of especial commendation of anything which may subsequently emanate from his pen. He enters earnestly into his subject, and arrests the attention of his reader by the perspicuity of his style, and the rapidity with which he pursues his subject and cites his authorities.

Dr. West belongs to that portion of the profession, who if they do not ignore the use of the speculum in the diagnosis of uterine diseases, depreciate its value and importance by denying the frequency of the existence of local lesions, and their influence in developing that train of constitutional disturbances which go to make up a large proportion of that long catalogue of ills, which find their places in the list of Female Diseases. These opinions give a manifest bias to all his views, and their influence may be traced in his teachings.

The volume before us, unlike his *Croonian Lectures on Ulceration of the Os Uteri*, is too general in its character, to allow the partizan character, into which the discussion of this latter subject has betrayed the disputants, to interfere with its real and practical value. His skepticism upon this one subject, finds bounds when he enters upon the discussion of those subjects

which from their nature preclude a reference to mooted points in pathology, and furnish no opportunity for the championship of a party.

A work of such general character furnishes, too, fewer salient points for criticism than one which comes avowedly forth as the exponent of some peculiar doctrine. Its teachings find more ready acceptance, and they are admitted at once to a place in the mind of the practitioner, and soon put to the test of every-day practice.

The volume opens with two sensible and practical chapters on the importance of accuracy in diagnosis; a notice of some of the peculiar elements characterizing the female system, which impress upon the diseases incident to the sex their especial modifications and forms; the manner of making tactile examination of the abdomen, and of the generative organs; and of the method of employing the uterine sound and the speculum.

Among the illustrative cases of errors in diagnosis, the following example, in these days when such frequent recourse is had to examinations of the urine, and such serious results are predicated, upon the appearance of albumen in the renal secretions, will bear quoting:

"A middle-aged woman complained of frequent desire to pass water, and of discomfort in voiding it; she was dyspeptic, and out of health. Her urine was tested, and found to contain albumen; and the irritable state of her bladder was assumed to be dependent on the disease of her kidneys. Treatment improved her general health, but brought no relief to her dysuria. At length careful observation discovered the albumen to be due to the admixture of vaginal discharges with her urine: a not infrequent source of it in women who suffer from leucorrhœa, while examination, which had been delayed too long, detected a small vascular tumor just within the orifice of the urethra, to the irritation produced by which her symptoms were due, as was shown by their immediate disappearance on its removal."

His directions for the manner of using the uterine sound are simply what the manipulation requires, and being confined to the mode of introducing it, does not admit of any criticism. He gives at length the manner of employing the speculum, but while faithfully teaching the methods of using it, manages to envelop his instructions in a cloud of doubts of its utility, or the necessity of its employment, except upon extraordinary occasions. We quote directly our author, and allow him the use of his own language: "To answer the broad question, 'What is your opinion of the speculum?' I feel, on the other hand, to be a very difficult matter, and to expose me to much risk of being misunderstood. I will, however, do my best to reply to the inquiry. Those who first introduced the speculum into practice, employed

it for two purposes; partly as furnishing a new means of diagnosis, partly as enabling them to adopt various modes of local treatment, which without it, were impracticable. Now I believe that the advantages of these topical medications for which the speculum is needed, has been greatly overrated; though there are some cases, and those, such as have proved most rebellious under other plans of treatment, in which these local measures may be resorted to with the most signal advantage. In estimating the value of the speculum as a means of diagnosis, I think that the advances in knowledge of uterine diseases, of which it was the indirect occasion by the impulse which it gave to their study, are sometimes confounded with those positive additions to our information, which we owe exclusively to the use of that instrument."

Any admissions of the value of the instrument as a means of diagnosis, demanded by truth, are apparently reluctantly expressed, and uttered with great caution. At the same time, he indulges in no violence of language, and decries the employment of intemperate opposition, and the imputation of dishonest motives to the advocates of the instrument.

He makes a practical suggestion as to the insufficient length of many of the instruments in use, and of the failure from this cause, to reach the os uteri; and agrees with the opinion of the late Professor Lisfranc, that a speculum ought to be at least seven inches long.

Menstruation, and its Disorders, are discussed in the third, fourth and fifth lectures. Tardy puberty, and amenorrhœa from malformations are first considered, when he proceeds to the consideration of *amenorrhœa from causes which require the interference of the physician*.

There are two conditions of the system under which this derangement of the health occurs, one of *plethora*, in the other of *anæmia*; but with a tendency of the former to pass into the latter, a transition which often takes place very speedily.

These conditions, with their accompanying symptoms, and appropriate modes of treatment, are graphically described, but we do not find anything especially new in the description, to add to our stock of knowledge in the pathology or treatment of the disease.

Menorrhagia is next considered, under a classification which he deems the only one of real practical utility; viz., 1st. Depending on some cause seated in the constitution generally. 2d. Depending on some affection of the sexual system.

At this point Dr. West says: "One caution is, perhaps, worth giving before I say anything more about menorrhagia. It is, that every excessive

hemorrhage from the unimpregnated uterus, during the years of sexual activity, is not necessarily menorrhagia. Women themselves are apt so to regard all losses of blood during that period of their life, and practitioners are too often guilty of the same oversight. Menorrhagia is an excess of menstrual discharge, an overabundant hemorrhage, the cause of which, in the first instance, is that congestion of the sexual organs which attends maturation and escape of an ovule from the ovary. Outbursts of bleeding may take place from the womb in some cases where the menses have been long suppressed, affording relief to the system, or even by their excess jeopardizing the patient's well being, and this with no more real reference to the function of which menstruation is the sign, than exists in a case of hemorrhage from the bowels, or of bleeding from hemorrhoids. In the same way, too, a patient may bleed to death from a cancer of the womb, or from a polypus, or fibrous tumor of that organ, and yet such hemorrhage may be no real menorrhagia."

But we have not space or time to devote to the consideration of the several pages which he gives to this subject, including treatment, and the indications for the several modifications of the same.

The next section is devoted to the consideration of Dysmenorrhœa. But we do not discover in it anything calling for especial notice. The symptoms accompanying the several forms of painful menstruation are carefully given, and the treatment applicable to each variety indicated with equal painstaking. The remaining fourteen lectures or sections of the book are occupied with diseases especially affecting the uterus.

In this connection we may add, what we have omitted before to notice, that notwithstanding the fullness of the title, the author does not profess this volume to be a complete treatise upon female diseases, but designs to continue the subject in another volume, to be published in a year or two, in which will be considered the diseases of the ovaries, and of all the parts connected with the uterus; of the bladder, vagina, and external organs.

In the volume before us, he considers inflammation of the uterus, acute and chronic hypertrophy, ulceration of the os uteri, cervical leucorrhœa, displacements of the uterus, uterine tumors and outgrowths, and cancer of the uterus. A series of subjects sufficiently ample to be far beyond our power to do full justice in the compass of a review proportioned to the number of our pages. We shall skim but lightly over the several chapters, stopping only sufficiently long to indicate the character of their contents, and shall by no means either duplicate the volume, or render by our abstracts, reference to it unnecessary.

By way of introduction to the diseases of the uterus, and particularly of inflammations, our author refers to some of the conditions which follow delivery, especially to its enlarged state from want of due exercise of the process of involution of the organ, by which it remains permanently, or until relieved by treatment, in a state of congestion. Cases of a more genuine hypertrophy of the womb, he says, take place independently of pregnancy, which he charges to a condition of uterine congestion, induced by the imperfect, or incomplete act of marital intercourse, and intimates that in such cases, an enquiry into the condition of the virile powers of the opposite sex is not beneath the notice of the physician in the course of his treatment.

One other form of simple uterine hypertrophy he notices in this connection, in which the enlargement is limited to the neck of the uterus. It is usually consequent on child-bearing, and is perhaps, more strictly speaking, rather the result of a partial deficiency of involution of the uterus than the effects of a genuine hypertrophy of the part. He has, however, met with it in sterile women, and once even in an unmarried girl. The chief increase is in length, the portio vaginalis, instead of being half or three quarters of an inch in length, measuring an inch and a half or two, or even three inches. The only treatment is removal, an operation which he by no means recommends.

Acute inflammation of the unimpregnated uterus is an ailment universally admitted to be of rare occurrence. It may, however, be caused by the extension of gonorrhoeal inflammation; sudden suppression of the menses; and by unaccustomed and intemperate sexual intercourse. In a fatal case of acute uterine inflammation, accompanied by peritonitis, a fibrous tumor of the size of a hen's egg was found imbedded in the posterior wall of the uterus.

A full discussion of the points involved in the above subjects brings our author to the consideration of *chronic inflammations* of the uterus, which he treats in the two succeeding sections.

This furnishes him with the first legitimate opportunity he has had, to indulge his love for discussion, and enunciate the views of his school upon the subject of the influence of local uterine disease, and of the pathological non-importance of ulceration of the os uteri.

The section is a recapitulation of the arguments employed to disprove the position assumed by those who discover, if not in one the cause of the other, at least so close a connection between the local disease and the attendant constitutional disturbances, that the treatment of the former is essential to

ensure a mitigation of the latter symptom. Reference is made to his Croonian Lectures for a greater amplification of the subject.

We can not but regard the manner in which Dr. West endeavors to dispose of the question which most unavoidably, and we think somewhat embarrassingly, meets him in the way, how to account for the repeated cures attendant upon local medication,—as a most “weak invention.” Committed to one side of the argument, like disputants in a debate, he is compelled to meet all the advances of his opponents, by a reply of some sort, even if sound logic is sacrificed in the discussion. The patients benefited and cured by local treatment after years of suffering, and ineffectual general treatment, will, however, continue to confound these arguments, and furnish the most convincing proof of the strength of the position of those he opposes.

He admits, however, that pregnancy, delivery, or miscarriage may develop ailments which point to a purely local cause for their origin. But even in these cases, he attributes the symptoms to uterine congestion following upon the conditions of pregnancy and delivery, and the cases he cites are given to negative, as far as possible, the theory of their dependence upon ulceration or abrasion, or any form of disease which may be specifically located at the os, or within the cervix.

There is one gratifying feature in the manner in which Dr. West has treated the subject in this connection. He bases his objections upon purely pathological grounds. He employs none of the puerile arguments, which of late have been so freely used, ringing the changes upon outraged female modesty. That pseudo knight-errantry in behalf of the virtue and modesty of the sex, avowed by some, has found no champion in these pages. He has indulged in no declarations, such as some of those enlisted in this crusade for the preservation of the honor of women, have employed, and who have avowed, that unless some check was placed upon the use of the speculum, they should feel compelled to abandon the treatment of female diseases!*

We shall make no attempt to analyze the five sections, including seventy pages, devoted to the consideration of displacements of the uterus. This is the less necessary, as fewer considerations of pathological importance are concerned in the production and maintenance of the malpositions of the uterus and the vaginal walls, than in the other morbid conditions of the sexual

* See debate reported in the American Journal of the Medical Sciences, October, 1850, p.p. 533,—42.

system discussed in the volume. These displacements generally, although not invariably, take place in consequence of pregnancy, and delivery at full term, or the anticipation of that event by miscarriage. The attendant symptoms are those which result principally from the abnormal relations of the parts, and the consequent distress from the malpositions of the organs and their connections involved.

The chief interest in the subject is centered in the means of diagnosis of the different degrees of misplacement, and the adaptation of proper methods of treatment. Mechanical means of support, except in the slighter cases, are requisite for the relief of the patient, and the choice of the proper instrument constitutes the prominent indication in the treatment.

These several subjects are all treated in an eminently practical manner, and the instructions are sound.

The consideration of the subjects of Uterine Tumors and Outgrowths occupies four lectures, or chapters. The first of these, the fourteenth lecture, is devoted to the several forms of polypi.

Of the minute description which he gives of uterine polypus, through its various forms of organization and development, from the simple *mucous polypus*, we content ourselves with extracting the following passage only, relative to the means of making a diagnosis in these cases:

"I do not know of any special difficulty attending the *diagnosis* of these outgrowths, nor of any particular rules which can be laid down for the avoidance of error. The very small polypi are sometimes scarcely perceptible by the finger, and I have already referred to the enlargement of the cervix which they occasionally produce, and which is likely to mislead the unwary. The only rule that can be given for practical guidance is, however, this: that in no case of long-continued menorrhagia should we be content with mere digital examination, but should invariably employ the speculum; and further, if no satisfactory conclusion be thereby arrived at, we should dilate the os uteri with sponge tents, in order that the cervical canal may be brought within reach both of examination with the finger and with the speculum. If these precautions be neglected, the patient whom we have failed to relieve, may place herself under some more careful practitioner, who will at once detect the cause of her symptoms, and cure her by an extremely simple operation."

In removing "*these small outgrowths*," he recommends always the use of the bivalve speculum, in employing for that purpose either the forceps or scissors:

"To attempt their removal by means of forceps or scissors, simply guided

by the hand, is at best but a bungling mode of proceeding, while, besides, the risk of hemorrhage is much greater than it would be if, after the removal of the polypus, the part whence it sprang were touched with the solid nitrate of silver, a precaution which I now never omit."

As a matter of prudence, he deems it necessary that the patient should be kept in bed a day or two after the operation.

The fifteenth, sixteenth, and part of the seventeenth lectures are devoted to the consideration of fibrous tumors of the uterus.

After a concise description of the peculiar anatomical characteristics of these tumors, and of the several different situations from which these growths may proceed, he passes on to a notice of their size and number, the changes which they undergo while in the uterine tissues, the means which nature at times seems to adopt for the purpose of getting rid of their presence; and a consideration as full as statistics can furnish data, of the influence of age on the production of these morbid growths. The symptoms attendant upon their development, are minutely given; and the means of establishing a diagnosis in contra-distinction to ovarian tumor, from flexions of the uterus, uterine cancer, and pregnancy, are carefully considered.

The several subjects are treated in an eminently practical manner, and we think the physician can scarcely arise from the perusal of the several pages devoted to their consideration, without a consciousness of being fully compensated for the time devoted to their study.

While admitting the hopeless task of treating an irremediable disease, he deprecates the abandoning entirely the patient; but urges a palliative treatment, to husband the strength, and to retard the growth of the tumors. The disease often has pauses in its course; in some rare cases a perfect recovery is effected by the hands of nature; and their development is generally slow, and much less rapidly fatal than many other forms of uterine disease.

He has little faith in medication to produce their absorption. Mercurial preparations have no such influence; and the alleged powers of iodine seem to have been much over-rated. He thinks, however, that the rapid increase of these growths is sometimes restrained by this agent, and is therefore accustomed to employ it. Its use should be continued for many months, and the patient only slowly brought under its influence. The mineral waters of Kreunach, in Germany, which contain both iodine and bromine, have acquired, and apparently with justice, considerable reputation for the special influence which they exert over enlargements and fibrous tumors of the uterus.

Surgical interference he regards with but little favor. Such of them a

spring from a distinct pedicle, and hang down into, or beyond the uterine cavity, admit of removal either by the knife or the ligature. He regards the opening of the abdomen for the extirpation of a fibrous tumor, a proceeding to be altogether deprecated. Nor does he regard with more favor the enucleation of these tumors by incisions made through the os uteris, or the lower segment of the womb.

The balance of the chapter he devotes to *Fibrous Polypus*. And for their removal prefers their incision by the knife, to the use of the ligature.

The balance of the volume, three lectures, is devoted to the consideration of malignant, or cancerous diseases of the uterus. But a lack of space, as well as a want of time, compel us to forego an analysis of the contents of the several pages devoted to the subject.

In bringing our notice of this work of Dr. West to a conclusion, we can do no other way, than speak of it in terms of commendation. The practitioner will find it convenient as a work of reference, and if he remember the peculiar tendency of the school or sect to which the author belongs, and make due allowance for the bias of the doctrines which they deem it essential to teach, will find himself repaid for the time devoted to its perusal.

While this volume will not detract any from the reputation of Dr. West, we are compelled to say, that we doubt whether it will do as much towards the building up, or maintaining a reputation, as did his work on Diseases of Children. The *eclat* which accompanied the publication of the latter work may, perhaps, have been unfortunate, inasmuch as it renders the profession unsatisfied, unless by a succession of works equally brilliant. N.

ART. VI.—*Report of Mortality in Buffalo for the month of Feb., 1858*

By H. D. GARVIN, M. D., Health Physician.

DISEASES.	No.	Males.	Females.	No Sex given.
Accident, ...	2	1	1	
Bronchitis, ...	2	1	1	
Bright's Disease, ...	1		1	
Cirrhosis of Liver, ...	1		1	
Congestion of Lungs, ...	1		1	
" " Brain, ...	1	1		
Convulsions, ...	17	11	6	
Croup, ...	3	2	1	
Debility, ...	4	2	2	
Disease of Brain, ...	1	1		
Diarrhœa, ...	1		1	
Droopy, ...	6	2	4	

DISEASES.	No.	Males.	Females.	No Sex given.
Delirium Tremens, ...	2	2		
Dysentery, ...	2	1	1	
Enteritis, Acute, ...	2	2		
Epilepsy, ...	1		1	
Fever, Typhoid, ...	1		1	
" Typhus, ...	1	1		
" Scarlet, ...	2	2		
Gastritis Chronic, ...	1		1	
Gangrena Senilis, ...	1		1	
Heart Disease, ...	2	1	1	
Hereditary Syphilis, ...	1	1		
Hydrocephalus, ...	8	5	3	
Laryngitis, ...	2	2		
Marasmus, ...	5	2	3	
" Senile, ...	1		1	
Meningitis, ...	1	1		
Medullary Sarcoma, ...	1		1	
Obstruction of Bowels, ...	1		1	
Old Age, ...	4	1	3	
Phthisis Pulmonalis, ...	15	8	7	
Pneumonia, ...	2	1	1	
Premature Ossification and Closure of Bones of Head, ...	1	1		
Pyæmia, ...	1	1		
Still-born, ...	4	3	1	
Teething, ...	2		2	
Tabes Mesenterica, ...	1		1	
Whooping Cough, ...	2	1	1	
No Cause of Death given, ...	9			
Total, ...	116	56	51	

SEXES.

Males, ...	56
Females, ...	51
Sex not given, ...	9

Total, ...116

AGES.

Still-born, ...	4	Between 20 years and 30 years, ...	8
1 day, ...	4	" 30 " " 40 "	6
1 day and 30 days, ...	7	" 40 " " 50 "	8
Between 1 month and 6 months, ...	16	" 50 " " 60 "	2
" 6 months and 12 "	13	" 60 " " 70 "	5
" 1 year " 3 years, ...	16	" 70 " " 80 "	5
" 3 " " 5 "	8	" 80 " " 90 "	1
" 5 " " 10 "	4	" 90 " " 100 "	0
" 10 " " 20 "	7	" 100 " "	0
	77		35
Ages not given, ...	3		112

Total, ...144

NATIVITIES.

American, (white,)	69	Prussian, ...	0
" (colored,)	7	Swiss, ...	1
German, ...	13	French, ...	3
Irish, ...	12	Scotch, ...	1
English, ...	2	Bohemia, ...	1
Canadian, ...	0	Country not given, ...	5

Total, ...11

EDITORIAL DEPARTMENT. •

The Medical Department of the University of Buffalo.—Twelve years ago, when the Med. department of the University of Buffalo was organized the condition of the medical profession and of medical colleges, was very different from the present state of things. Then, the office of every medical practitioner contained one or more students, and those who had attained to any degree of eminence, were absolutely flooded with applications. In a recent conversation with some of the original teachers in the Buffalo school, who were of course close observers of the state of the colleges at that time, our attention was called to the fact which we have just stated, and the immense contrast which is now presented. The Buffalo Medical College commenced with nearly eighty pupils, and that, after a notice of only three months. In the session of 1849-50, the class numbered 115, which, we believe, was the largest class ever assembled at any season. As far as our recollection serves, it was about that time that the class at the Louisville University, numbering upwards of 400, was almost too large for the capacious halls of their noble building. The colossal Jefferson then merited the title, as much and even more than it does now, when it can boast that it assembles the largest medical class in the world. All around us the schools were full, the professors paid, and the medical men not connected with any institution croaking about the crowding of the profession, low standard of merit, *et cetera*. But now the contrast will be striking and apparent to every one. We have merely mentioned particularly one or two of the medical schools, but it is well known that at the time to which we refer, all were highly prosperous; and in looking now for some of them, we find that they have absolutely given up the ghost; some are dragging out a miserable existence with nominal fees, weakened faculties, and almost no students; and others, by an entire abolition of fees, are preying upon the vitals of their woe-begone neighbors, contributing as much as possible to lower the professional standard, and

reduce their competitors the alternative of extinction, or the level to which *they* have fallen. In spite of all this, however, the Philadelphia and New York schools hold their own, making now, with the exception of the Nashville school, the only exception to the general rule.

The Buffalo school has not suffered in this respect out of proportion to the general diminution of medical students throughout the land. In one thing, however, it is an exception, its faculty is strong, and its dignity has not suffered from the reduction of fees; added to this, are a determination and a power to weather the storm through, and clinical advantages which are not surpassed even in Philadelphia or New York. We feel attached to the Buffalo Medical College, from the high standard of honor with which it commenced, and which it has invariably sustained, and our readers especially will sympathize with our feelings of gratitude for the valuable aid which the Journal has always received from the faculty, and which is one of the causes which has been most instrumental in placing it in the position which we are proud to say it occupies.

The strength of the faculty, which will compare favorably with any in the country; the clinical opportunities, the Hospital of the Sisters of Charity being situated directly behind the college building, and students having opportunities of observing medical and surgical cases at the bed side, under the guidance of the ablest clinical teachers in the country; the maternity hospital, also situated within a stone's throw of the college, which is under the direction of the Professor of Obstetrics, and to which all the graduating class have repeated access: are advantages to which we hope and are confident that none of our readers will be insensible, when recommending to their students a place for the prosecution of their winter studies. All these are certain to make the school ultimately in the highest degree successful, in point of numbers, and we are as convinced of its inevitability as though we already saw 200 students in its halls.

We regret to state that Prof. Hunt, our senior editor, has announced his intention of resigning his chair. This is owing to engagements which he has formed with our most prominent daily paper, and which closely occupy his time. We copy resolutions passed by the faculty expressive of their regret at the step which he proposes to take. The lectures on that branch, will be given this year by Dr. A. W. Nichols, formerly Demonstrator of Anatomy, who has been appointed lecturer, and who is already favorably known to our readers as reporter of cases occurring in the wards of Prof. Flint, at the hospital, and by other papers of merit which have appeared from time to time in this Journal.

"Professor Sanford B. Hunt having announced his intention of resigning the chair of *General and Descriptive Anatomy and Physiology* in the University of Buffalo, the medical faculty of the University, desirous of giving expression to the sentiments occasioned by this announcement, adopt unanimously the following resolutions:

"*Resolved*, That the faculty receive this announcement with profound regret, feeling that by the resignation of Prof. Hunt, they lose a colleague whose services as a professor have been most valuable to the college, and with whom as a friend and associate their relations have ever been a source of pleasure and advantage.

"*Resolved*, That in tendering to Prof. Hunt their warmest wishes for his success in those labors which have deprived them of a valuable colleague, gratified by the assurance that his interest in the science and profession of medicine will remain unabated, and that his exertions will continue in behalf of medical literature, which is already so much indebted to his talents, scientific attainments and manly independence.

"*Resolved*, That a copy of these resolutions be transmitted to Prof. Hunt by the Registrar of the Faculty, and that copies be furnished for publication in the Buffalo Medical Journal, and in the daily papers of this city.

"GEORGE HADLEY, Registrar.

"Buffalo, Feb. 24, 1858."

We also copy from the Commercial Advertiser, a report of the annual commencement, by the senior editor. At the meeting of the Council of the University of Buffalo, held on the 24th ult., Henry W. Rogers, Esq., was elected member of the council, to fill the vacancy occasioned by the death of the late Dr. Thomas M. Foote.

The following medical gentlemen were added to the list of curators of the medical department of the University:

Charles H. Wilcox, M. D.,	.	.	.	Buffalo.
Lewis P. Dayton, M. D.,	.	.	.	"
W. McCullum, M. D.,	.	.	.	Lockport.
W. B. Gould, M. D.,	.	.	.	"
T. H. Blake, M. D.,	.	.	.	Dansville.
B. L. Hovey, M. D.,	.	.	.	"
J. Beatie, M. D.,	.	.	.	Geneva.
C. E. Washburn, M. D.,	.	.	.	Fredonia.
T. D. Strong, M. D.,	.	.	.	Westfield.
D. D. Robinson, M. D.,	.	.	.	Hornellsville.

The annual commencement of the University of Buffalo, medical department, took place at American Hall, Feb. 23d, in the presence of an audience more than usually large for such occasions, and comprising a large modicum of the *élite* of the city. Among those present on the platform were ex President Fillmore, in his capacity of Chancellor; Hon. Geo. R. Babcock, and

other members of the Council; the Faculty of the school, among them Prof. Mack, of St. Catharines, C. W., a new face to Buffalonians; and a considerable number of Curators from abroad who were here in pursuance of their duty as examiners. We saw among them Dra. Briggs and Whitbeck, of Rochester, Dr. Cotes, of Batavia, and Dr. Charles, of Angelica.

The services were opened by an impressive and appropriate prayer by Rev. Dr. Burtis, in which he feelingly alluded to the loss sustained by the school in the death of Dr. Foote, who has been a member of its Council from the beginning.

Prof. Rochester, Dean of the Faculty, then announced that the distinction of special mention had been conferred on five gentlemen, whose theses were especially meritorious, and that the honor of an authority to publish had been conferred on two of these, viz: Bernard Monahan, of Buffalo, and Alonzo W. Gilbert, of Bowmansville, C. W.

The degrees were then conferred by Chancellor Fillmore, in the usual form, on the following young gentlemen:

Wm. Henry Butler,		Buffalo, N. Y.
Walter Butler Coventry,		Utica, N. Y.
Thomas Cushing,		North East, Pa.
Alonzo W. Gilbert,		Bowmanville, C. W.
Wilmot Hall Garlick,		Cleveland, Ohio.
George W. Jones,		Belleville, C. W.
Augustus F. D. Jansen,		Buffalo, N. Y.
Bernard Monahan,		Buffalo, N. Y.
Joseph Tripp,		Morenci, Mich.

The charge to the graduates was given by Prof. Moore, of Rochester. It was a thoughtful and careful statement of the essentials of the true physician, involving a discussion of the claims of medicine to the title of an actual science, an honest and fearless statement of what is known and what is unknown, and an earnest protest against a too confident trust in the efficacy of drugs. Dr. Moore asserted that diagnosis was the first element in the character of the true physician; that the capacity to interpret the meaning of symptoms, and to predicate from them the actual phenomena which were occurring concealed within the system, was much more valuable to the patient than the extensive knowledge of druggists, formulæ and recipes. To the physician, however, to his pocket and fame, drugs are the amulet which is indispensable. The physician who gives advice is, by the masses, rejected for him who gives physic. The people have no appreciation of the silent forces of nature, and how gently and easily they may be guided by the skill

of the acute, investigating physician. They wish physic, pills, boluses and petions, big or little, and as long as the appetite exists they will have them.

We could occupy much space pleasantly in a sketch of Prof. Moore's admirable charge, but should fail to do justice to its broad and philosophic spirit, its catholicity, and its high merit as a literary production.

The address thus completed, the benediction was given by Rev. Dr. Bur-
tis, and the audience broke up. The young men thus started out upon the career of an arduous and responsible profession, are, it is believed, of such scholarship and talent as to do honor to themselves in its ranks.

The Health Physician's Fourth Annual Report of the Mortality of the City of Buffalo for 1857.

We have delayed for a little our notice of Dr. Dayton's brief and comprehensive report, that we might give it such a notice as the importance of the subject on which it touches demands. In the year 1854 the Board of Health was organized as usual, but with new men in its control. A. F. Lee was President of the Board, and James M. Newman, physician. Up to that time the records of deaths had been imperfect, and the action of the Board of a spasmodic or intermitting character, the sanitary laws being enforced only in epidemic seasons, and allowed to lie dormant in intervals of health.

The Board was not what it should be, a constant, ever-acting power, always carefully watching the inroads of disease, or engaged in increasing our chances of health. But in 1854 a new régime was set up. The sanitary laws were made operative, and the business of the Health Office reduced to system and efficiency. Under all subsequent officers the system inaugurated by Dr. Newman had been maintained, and we believe that no department of our city government has been more faithfully administered than this. The present Board is well made up, and will sustain the reputation of the office.

During the year 1857 there have been 2,268 deaths from all causes. This, assuming the population to be 100,000, would give a ratio of mortality of *one in forty-four*, indicative of great good health in our community. But it should not be forgotten that disease is not the only cause of death, and that a careful analysis of Dr. Dayton's tables would show that a very considerable deduction from our mortality proper may be made. It would be an interesting study to take this 2,268 deaths, and deduct from it all which are not the result of disease, or if of disease, such as are clearly

preventable. Running over the tables, we can segregate the following list of this class: Small pox, 2; syphilis, 6; delirium tremens, 3; accidents by steam explosions, etc., 42; burned, 2; drowned, 38; fractures, 5; intemperance, 23; murder, 1; poison, 2; suffocation, 2; suicide, 6; still-born, 90. These foot up a total of 222, which, deducted from the grand total, leave us only 2,046 deaths from what may be considered as unavoidable diseases.

But are all these unavoidable? We do not mean to apply the strict physiological idea that all deaths are the result of violations of the laws of nature except those from old age, but simply to still further segregate a class of diseases are in themselves of such a nature as to be prevented if we knew how, or if knowing how, we would do it. Who believes that it was "by visitation of God and not otherwise," that 1,434 little children under five years of age have died in this city during the past twelve months? Who does not know that a very large proportion of the 213 deaths from convulsions, the 126 from cholera infantum, the 94 from diarrhoea, and the 57 from dysentery might have been avoided by a proper attention to diet, cleanliness, ventilation and exercise on the part of those having control over them?

There is an element of responsibility involved in this preventability of disease which is not so fully appreciated as it might be. The children of the rich stand twice the chance of life that is given the children of the poor. Take a class of one hundred new-born children on the Points, the flats, or any other district where want and dirt are combined—half will be dead before the end of a year, and not one quarter will ever see five years of age. With the rich it is different, and though the ratio of infantile deaths among the comfortable classes might be hard to get at, yet the data exist for an approximate estimate. The liabilities of childhood in an ordinary season correspond very closely with those of the adult in an epidemic season. In the fall of 1854 we published a statement, which showed, very conclusively, that the blessings of health were largely dependant on our household comforts and out-door conveniences, such as good pavements and sewers, fresh air and pure water. A comparison was made between a district bounded east and north by the city line, south by Clinton street, and west by Michigan street, in which, during the months of June, July, August and September, 1854, died 341 souls from cholera and its allied diseases, while a corresponding district, bounded north by the city line, east by Main street, west by Delaware, and south by the Terrace, had during the entire disastrous season of 1856, only 22 deaths from the same class of disease. A similar comparison of the number of cases of cholera on paved or unpaved streets presented results equally startling.

Thus cholera—the black tiger of India—is a preventable disease. And the same causes which disarm it of its terrors are equally efficient in the whole class of epidemics, and in many cases of the epidemic diseases. The lesson is encouraging, for it teaches us that sanitary precaution is not in vain, and that an efficient health-police may throw a bulwark around the life of the citizen.

The Proceedings of the Physicians' Meeting.—Pursuant to call for a meeting of the Medical profession of Cleveland and vicinity, to be held at the office of Doctors Ackley & Garlick, a very large number of physicians were in attendance.

A. S. Palmer, M. D., was called to the Chair, and John Holland was appointed Secretary.

On motion of the Chair, Dr. Garlick was called upon to explain the object of the meeting.

He stated briefly that the meeting was called to take into consideration the late action of the Faculty of the Cleveland Medical College, in recommending Dr. I. J. Tod as a person eminently qualified as Physician and Surgeon, to take charge of the Marine Hospital of this city.

Remarks were made by Doctors Ackley, Thrall, Strong, Sterling, Garlick, Gordon, and several others, it having been conclusively shown that Dr. Tod had not been practising medicine for the past thirty years, and it being equally evident that the faculty were aware of this when they signed the paper.

On motion of Dr. Capener, the Chair appointed Drs. Sterling, Garlick, and Gordon, a Committee to draft resolutions expressive of the sense of the meeting.

The Committee having retired for that purpose, remarks were made by Drs. Everett, Thrall, and other Physicians.

The Committee returned, and reported the preamble and resolutions, which were ordered to be read; and after considerable discussion, Dr. Nelson proposed their adoption.

The motion having been put by the Chair, the preamble and resolutions were adopted without a dissenting voice.

WHEREAS, It has come to the knowledge of this meeting, that the Faculty of the Cleveland Medical College did basely use their influence, and abuse the confidence and trust usually reposed in men occupying their posi-

tion, by signing a certificate, directed to the Hon. Howell Cobb, wherein they knowingly, and in the opinion of this meeting, for sinister purposes, misrepresent the facts in the following words, to wit:

"CLEVELAND, February 1, 1858.

SIR.—It having come to our knowledge that efforts are being made by contemptible parties to request the removal of Dr. Tod, the present Physician of the Marine Hospital, we, as Professors of the Cleveland Medical College, take this opportunity of assuring you that we are intimately acquainted with Dr. I. J. Tod, and know him to be eminently qualified, both professionally and otherwise, to discharge the duties imposed by his position. And we can further assure you, that as long as he holds the post, the interests of the Government will be well cared for.

To the Hon. HOWELL COBB, Secretary of U. S. Treasury."

Resolved, That the fact that Dr. Tod did abandon the practice of medicine as long ago as 1828, is beyond all doubt. That of this the Faculty were well advised; and that the said Dr. Tod has not, in any sense, been engaged as a practitioner of medicine since that time, until he assumed the duties of Physician and Surgeon of the United States Marine Hospital in this city.

Resolved, Therefore, that it is a self-evident fact, that Dr. I. J. Tod is eminently *unfit* to take charge of a Government Hospital, and that this the Faculty must have known when they signed the above certificate.

Resolved, That by this act, the Faculty of the Cleveland Medical College have forfeited all claims to the respect and patronage of the Profession.

Resolved, That the attempt of the Dean of the Faculty to justify this gross abuse of their position, when called upon by one of the Profession, by stating that when any particular skill was required at the Hospital, Prof. Webster (one of the Professors,) would attend to the case, is, at the best, but a miserable subterfuge, and a virtual acknowledgment that they know their statements to be untrue.

Resolved, That the assertion of one of the Faculty that Dr. Tod's fitness for that post was as good as that of Physicians in general of *this country*, is a base libel upon American Physicians—an insult to the Profession, and merits their indignation.

Resolved, That a Committee of three persons be appointed by the Chairman of this meeting, to lay this act of the Faculty before the Board of Medical Censors, at the approaching commencement of the College.

Resolved, That the medicals journals of our state, the Buffalo Medical Journal, and our city papers, be each furnished with a copy of the proceedings of this meeting, and be requested to publish the same in their respective journals and papers.

JOHN HOLLAND, Secretary.

B. Sterling, M. D.,
P. A. Gordon, M. D.,
T. Garlick, M. D.,
Robt. S. Strong, M. D.,
F. G. Thrall, M. D.,
H. A. Ackley, M. D.,
A. Everett, M. D.,
John J. Conlan, M. D.,

A. S. PALMER, M. D., President.

Wm. H. Capener, M. D.,
N. Nelson, M. D.,
J. Hammond, M. D.,
W. Dolan, M. D.,
W. B. Reznor, M. D.,
P. R. Everett, M. D.,
J. H. Marshall, M. D.,
Thos. S. Rodman, M. D.,

E. H. Sprague, M. D.

Address of Dr. Willard.—We are happy to learn that the address of our estimable fellow-citizen, Dr. Augustus Willard, before the State Medical Society recently in session at Albany, and over which he had the honor to preside, was, in all respects, an able and scientific document, highly suggestive in its character, and worthy of the habitually close observation and sound deductions of the author. Those who knew Dr. Willard well, anticipated, of course, that his official address would challenge and deserve the attention of the learned professional body before whom it was delivered, and we are happy to learn, as we have hitherto remarked, that this expectation was fully realized.

Rural districts are not, for obvious reasons, congenial to a rapid growth of professional character. Cities afford a better field for the development and exhibition of skill in medicine and surgery, and for the more speedy realization of that measure of fame for which every professional man earnestly struggles; but yet the personal history of the medical profession proves, that the most profound physicians of the commonwealth have been found among those who have commenced and terminated their practice in the rural districts. Removed from scenes of excitement and pleasure, with an abundance of leisure to study and observe, to read and reflect, they become, if blessed with sound and discriminating intellects and industrious habits, the embodiments of professional wisdom and science, to whom may be committed, without hesitation, the treatment of the most delicate cases of disease. We have in our mind's eye a large number of this class, who have shown themselves public benefactors.

Among them we recognize Dr. Willard. He commenced the practice of his profession in this village, and has grown gray among us. Proverbially estimable in all the relations of life, he especially deserves the gratitude of this community for his professional services. Unobtrusive and unambitious, except in the discharge of his public and professional duties; the knowledge of his worth and merit is nevertheless co-extensive with the state, as the fact of his election as President of the State Medical Society—a body of learned and scientific gentlemen—abundantly proves. To those who have availed themselves of his ministrations in the sad hours of sickness, (and who, in this community, has not?) it is a pleasure to feel that so flattering a compliment was bestowed on him, the obligations of which he has so satisfactorily and so creditably discharged.

The mission of the physician is one of peculiar and delicate responsibility, the assumption of which can only be properly hazarded by one combining all the requisites of fine intellect, sound judgment, professional learning and skill, integrity and honor. Without these, the physician is a dangerous man anywhere. The delicate mechanism of the human system can not be trifled with, with impunity; the no less delicate trusts confided to him, when invited to enter the family circle or the sick-room professionally, can not be betrayed without dishonor; and it would be well if these young aspirants for professional fame would ponder these suggestions, and aim to find an exemplar in such a man as Dr. Willard.—*Chenango American.*

The Pathological Society of Philadelphia.—We see with great pleasure in the pages of the last number of the North American Medico-Chirurgical Review, the proceedings of this society, the founding of which has been contemplated for some time. The rich field which a city of the size of Philadelphia presents for pathological investigation, has long since demanded the organization of such a society. New York has set the example, and the great interest which its proceedings have awakened in the profession, as well as the incentive which has been given to the study of this hitherto neglected branch of science, have not failed to excite the salutary emulation of the quaker city.

The Philadelphia society was organized on the fourteenth of October, 1857, and the following officers were elected:

<i>President,</i>	.	.	.	Dr. Gross.
<i>Vice-Presidents,</i>	.	.	.	Drs. La Roche and Stillé.
<i>Treasurer,</i>	.	.	.	Dr. Addinell Hewson.
<i>Secretary,</i>	.	.	.	Dr. Da Costa.
<i>Assistant Secretary,</i>	.	.	.	Dr. T. G. Morton.

The distinguished reputation of the officers of the society, and the talent and industry of its members, bespeak for it all the success that could be desired. The proceedings which appeared in the Jan. No. of the N. American Review, are of exceeding interest, and embody accounts of a number of valuable pathological specimens, such as fatty degeneration of the liver, cancer of the pancreas, liver, and thigh; fungus of the testicle; bony tumor of the scrotum, etc. The discussion of these specimens by men as eminent as Drs. Gross, La Roche, Stillé, and Da Costa, are useful to every one, and will form one of the most interesting features of the Review.

BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 13.

MAY, 1858.

NO. 12.

ORIGINAL COMMUNICATIONS.

ART. I.—*Tumor of the Parotid Gland. Complete Extirpation of the Mass; including the entire Gland.* By FRANK H. HAMILTON, M. D.

R. A. P., æt. 28, of Toronto, C. W., was struck by a small stone thrown by a lad, on the right side of the neck, in the year 1832. The blow was received at a point about one-quarter of an inch below the lobe of the ear, and directly over the seat of the parotid gland. The injury was trivial, and the slight wound soon healed. About one year from this, Mr. P. discovered a small tumor in the situation of the scar. This has continued to grow more or less rapidly from that time until it was removed. It was never painful until very lately.

Five months ago it had attained the size of a goose egg, and was situated mainly in front of the ear and upon the cheek. Stimulating poultices were then applied, which were always very painful, and after they had been continued one month a tumor was found to be forming back of the ear. The original tumor was now scarified at several points, and to the depth of half an inch; and various caustics, such as nitrate of silver, sulphate of copper,

etc., were thrust into the wounds. The poultices were also continued. Nearly at the same time, other masses were seen rapidly forming below, and under the chin, and a complete paralysis of the right side of the face with partial loss of voice, accompanied with difficulty of deglutition ensued.

This was his condition when in Feb., 1858, he applied to Dr. Hamilton for relief. He was then quite feeble; deaf in his right ear, and with occasional bloody discharges both from his ear and mouth. The tumor, or the successive masses, extended from a point on the face above the ear, to near the cricoid cartilage, and its breadth under the ear was nearly equal to its length, occupying the upper third of the neck on the right side. It covered also nearly one-third of the face.

Hoping that the recent formations were merely inflammatory exudations, Mr. P. was sent home for a few day and submitted to treatment, in the hope that they might be reduced.

Feb. 9, 1858, he returned to Buffalo, with only a slight change in the condition of the tumor.

Operation, in presence of Drs. Wilcox, Flint, Jr., and Bartlett. Mr. P. preferred not to take any anæsthetic.

Five crucial incisions were made across the two longest diameters of the tumor and the masses carefully brought to view. It was soon ascertained that the sterno cleido mastoid must be severed completely in order to enucleate the lower tumor. A large portion of the upper tumor lay beneath the digastricus, and it became necessary to sever it also. The branches of the external carotid were tied from below as they were brought into view. In all about twenty ligatures were applied. The loss of blood did not exceed half a pint, owing to the care taken to secure the vessels as soon as they were seen.

When the whole was removed the space originally occupied by the parotid gland was entirely empty; the bones, cartilages, ligaments of the joints, &c., constituting the walls of this cavity being fully exposed. The common sheath of the carotid artery and jugular vein were laid bare down to nearly the middle of the neck.

From the body of the tumor, extending forwards beneath the ascending ramus of the lower jaw, fairly into the buccal cavity, was a prolongation of the same structure which Dr. Hamilton tore out with his finger.

The portio dura of the seventh pair was brought completely into view during the dissection, lying in the body of the upper tumor; and after some hesitation it was cut in two.

The wound was closed with sutures, and dressed with simple cerate, &c.

On the fourth day erysipelas began to develop itself around the wound, which extended finally over the whole face and head. On the eleventh day it had nearly disappeared, and the cavity was closing finely.

His power of speech and of deglutition is now nearly recovered, but the paralysis of the right side of the face and of the right eyelids still continues. He is able to ride out and his recovery is beyond a reasonable doubt.

Examination of the Product. Large portions, especially of the recent formations, were of a solid consistence, but granular and easily broken with the finger, appearing like fibro-plastic tissue, or simple inflammatory exudation: so also the greater portion of the original tumor was solid, or only slightly softened, but other portions were much more softened.

Dr. Hamilton remarked that he did not intend here to discuss the possibility of this operation, although it was still doubted by *Erichsen*, and, perhaps by others. *Velpeau* had collected thirty-five cases in Europe in which it was believed that the parotid had been removed; and in this country it is claimed to have been removed thirty-eight times. Among the operators are the names of surgeons whose authority and opinions we have been accustomed to respect, and we cannot doubt but that they have done what they claim to have done: such are the names of *Mott*, *Homer*, *Randolph*, *N. R. Smith*, each of whom have operated once successfully, and of *George McLellan*, who operated eleven times.

Dr. Wilcox said that he was present at the operation, and that he saw the portio dura passing through the substance of the mass, and that he had no doubt the parotid gland was removed. Nothing remained behind the jaw after its removal, but the walls of the cavity with nerves, vessels, &c. There was no gland left; his finger penetrated to the mouth.

Prof. White said that he had examined the mass removed, and he had no doubt but that it was the parotid gland.

MICROSCOPIC APPEARANCES. BY AUSTIN FLINT, JR., M. D.

Prof. Hamilton kindly presented me with a portion of this tumor, cut from the spot which might have been the parotid gland, hardened and changed, of course in its character, by the progress of the disease. This specimen, however, was unfortunately laid in a warm, dry place, and before I had an opportunity of examining it microscopically, it was almost entirely desiccated.

The readers of this Journal will recollect, however, in the proceedings of the Buffalo Medical Association, an account of the microscopic appearances in some specimens of uterine mucous membrane sent to Prof. White by Dr. Congdon. These specimens had become entirely dried, but in being subjected to the action of a fluid resembling the liquor sanguinis, for a few hours; entirely resumed their original gross and microscopical appearances, so as to present a beautiful demonstration of the anatomical characteristics of mucous membrane. I am inclined to think that nearly all morbid specimens can in a like manner be brought back to their original state, after having been dried, by the action of a slightly saline fluid.

This specimen was treated in the same way as those sent by Dr. Congdon, *i. e.*, it was placed in a slightly saline solution and allowed to remain for twenty-four hours. At the expiration of this time, it had recovered, to all appearances, its original state, and it was subjected to microscopic examination.

On making a section, and slightly pressing it, there exuded a juice or "*suc*" as it is called by the French; this was formerly supposed to be one of the important signs of cancer, but later observations have shown that it exists in many benign tumors. A portion of this juice was then placed between two plates of glass and submitted to the microscope, a magnifying power of 282 diameters, being used. There appeared in the field a quantity of amorphous granules or organic molecules, having the Brunonian movement, a few exudation corpuscles, conglomerate corpuscles, pus corpuscles, with a number of fibro-plastic cells and free fibro-plastic nuclei. (See fig. 1.)

A small portion was then taken from the substance of the tumor and torn up with dissecting needles, (the tearing communicated to the fingers something of the sensation of a fibrous structure.) This portion having been carefully separated, moistened and covered with a thin plate of glass, was submitted to microscopic examination, the magnifying power being now 581 diameters.

In one part of the field, when the structure had not been very thoroughly torn up by the needles, a fibrous structure was apparent, enclosing spaces which were occupied by fibro-plastic cells, nuclei, &c. The enclosing structure consisted chiefly of the ordinary white inelastic fibre, or the element of areolar tissue. On removing the field to a portion of the specimen which had been more effectually torn up, and where the anatomical elements were not so crowded, there could be seen fibro-plastic cells, free nuclei, a few pus and exudation corpuscles, and organic molecules, having the Brunonian movement. I have attempted to represent some of the fibro-plastic cells and free nuclei in Fig. 1.

FIG. 1.

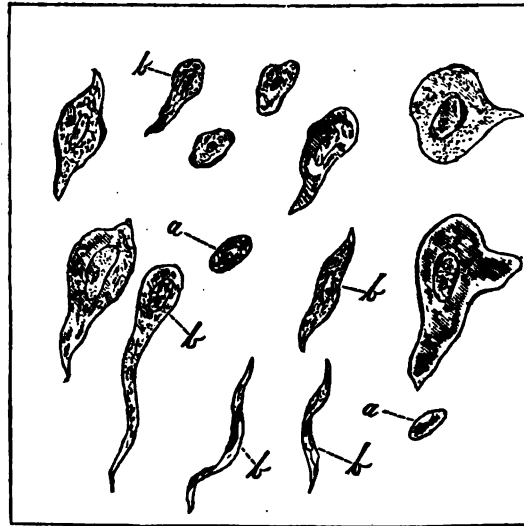


FIG. 1. Magnifying power, 571 diameters.

A. Free fibro-plastic nuclei.

B. Fusiform fibro-plastic cells.

The cells which are not lettered are probably epithelium, which has assumed some of the eccentric shapes which it sometimes does.

I would remark that the decided appearance of fibrous structure did not exist in all portions of the specimen, but that I saw it in a single place only: the pus corpuscles and inflammatory corpuscles were also more numerous in this portion. In other portions of the specimen the fibro-plastic cells and free nuclei were by far the most abundant.

The microscopic appearances of this specimen would, by a great many, be mistaken for cancer; some going so far as to regard every caudate cell as cancerous. Lebert, however, pointed out the *fibro-plastic* element, which is natural to healthy tissue, but in some forms of disease becomes increased in quantity, as in the present case. This is called one of the accessory anatomical elements, and it has now become a principal element, by a morbid process.

Robin describes three varieties of fibro-plastic elements:

- 1st. The free fibro-plastic nuclei;
- 2d. The fusiform fibro-plastic cells; and

3d. The fibro-plastic cellules.

The first two varieties we always find; but the last is more infrequent, though we often find it, and then always the other varieties in connection with it. The difference between the fibro-plastic cell and the true cancer cell is very marked, by an actual comparison; but it must be acknowledged, that from ordinary book descriptions, it would be almost impossible to distinguish between them. One of the most distinct points of difference is the size; the cancer cell is a great deal larger than the fibro-plastic: its nucleus is also proportionally larger, and it frequently has two or three immense nucleoli: their shape, however, is very much the same.

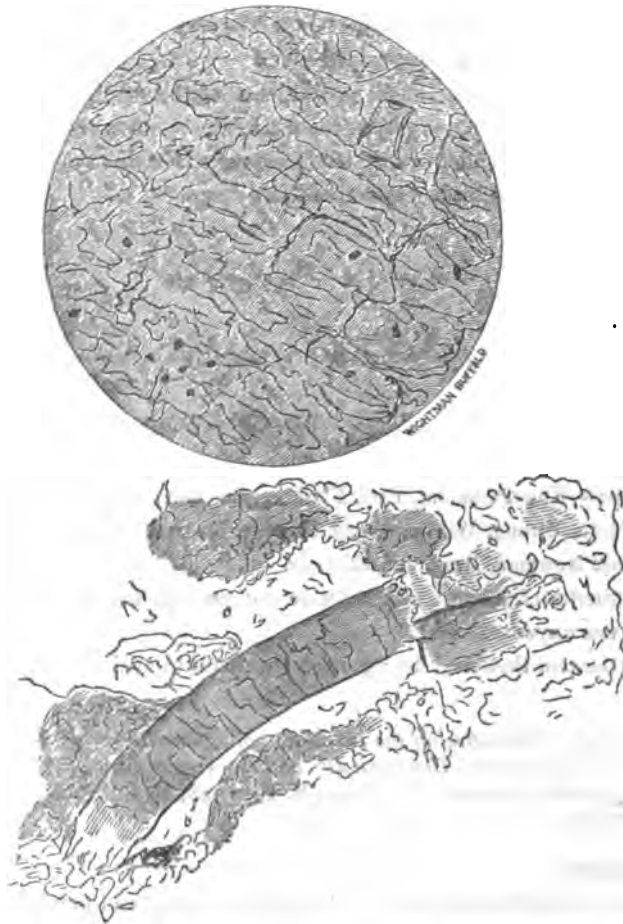
From the examination which I have made of this tumor, the microscopic appearances being confirmed by Prof. Flint, I have no hesitation in pronouncing it a fibro-plastic growth: as indeed its gross appearance led me to suspect. As such, though not malignant, it is liable to return, though by no means with the nearly absolute certainty with which true cancerous formations are reproduced. The white inelastic element is, I believe, frequently, if not always, found in some quantity in such formations. The exudative corpuscles and pus corpuscles, which existed in small quantities in some portions, would seem to indicate that there was, or had been, inflammation in that portion of the structure. The pus nuclei, and the fibro-plastic cells were the characteristic anatomical feature. The organic molecules are met with in nearly all tumors.

A day or two after the first examination, in looking at a portion again through the microscope, which presented nearly the same appearances which I have just described, I discovered evidences of glandular structure. The appearances are represented in Fig. 2.

The lower figure was drawn with a magnifying power of 60 diameters, and represents a glandular duct, which in all probability belonged to the parotid. The tube measures 1-125 of an inch or a little less than 1-10 of a line in diameter. It is surrounded by amorphous granular matter and is broken at one part.

The upper figure represents a portion of the tube subjected to a magnifying power of 571 diameters. In this, we see in the greater part of the field, a confused mass, but by close examination we are able to make out, in some places, the boundaries and the nuclei of the pavement epithelium. I have attempted to represent the actual appearances as accurately as possible, in these figures, taking no pains to make the appearances more distinct than they actually were. All these observations were made in the presence of, and confirmed by, Prof. Flint.

FIG. 2.



The exceeding difficulty in removing the parotid gland, and the fact that its possibility has been denied by some of our most eminent surgeons, render exceedingly important every iota of testimony which can be brought to bear upon this subject.

The microscopic testimony in this case, seem to me to be exceedingly important. The existence of glandular structure in that situation, being proof that some of the gland had been removed; and as after the operation there was no parotid, it is undoubtedly the fact that all the gland was removed. The size of the duct corresponds with the measurements given by Kölliker

of the ducts of the parotid, and the existence of epithelium settles the question. There was in another portion of the specimen, a part of a duct, but it was embedded in other matter and could not be very distinctly seen. I also noticed a few scales of pavement epithelium.

The evidence of Prof. Hamilton, with that of the gentlemen who were present at the operation, has placed the fact of the removal of the parotid in this case almost beyond a doubt, but I conceive that the microscope has added something and made "assurance doubly sure."

ART. II.—*Abstract of the Proceedings of the Buffalo Medical Association.*

TUESDAY EVENING, March. 2, 1858.

The Association met.

Present—The President, Prof. Flint, in the chair; Drs. Wyckoff, Hamilton, White, Strong, Wilcox, Mixer, Hawley, Eastman, Rankin, Rochester, Gay, Root, Newman, Ring, and Flint, Jr.

The minutes of the last meeting were not present, and on motion, their reading was dispensed with.

Dr. Newman then read his report on Puerperal Convulsions.

Report of the Committee on the connection of Albuminuria with the development of Puerperal Convulsions; and the employment of Chloroform as a remedial measure. By JAMES M. NEWMAN, M. D., Chairman of the Committee.

GENTLEMEN:

To your committee was assigned the duty of collating and presenting such facts as have a bearing upon the etiology of Puerperal Convulsions; especially in reference to the influence of the condition of *albuminuria* in predisposing and developing these convulsive seizures in the pregnant female; together with the comparative value of the employment of anæsthetic agents in addition to, or as a substitute for the usual treatment of copious venesection, or other depleting measures.

Puerperal eclampsia is, fortunately, a comparatively rare complication of gestation and parturition, and the opportunities for the study of the disease in the usual obstetrical practice of medical men infrequent, and the etiology of the affection is, we may conclude, to be only slowly evolved.

Dr. Arneth, among 6527 labors observed 13 cases of eclampsia, or 1 in 502.*

Dr. Carl Braun records the result of his own experience in the observation of 52 cases of convulsions occurring in 24,132 labors: 1 in 464.†

Dr. F. H. Ramsbotham, in the obstetrical statistics of the Eastern District of the Royal Maternity Charity, embracing a period of twenty-four years, and comprising 55,182 labors, reports 55 cases of puerperal convulsions, or 1 in 1003.3.‡

Dr. Churchill gives the statistics as collected from several authorities, where 273 cases of convulsions occurred in 190,318 labors, or 1 in about 693.75.§

Out of 20,357 labors under the care of the late Madame Boivin, at the Maternité, at Paris, the number of patients affected with eclampsia, was 19, or 1 in every 1071½.

Mad. Lachapelle, in 38,000 labors, had 61 cases of convulsions, or 1 in 622.

In the report of the Edinburgh Royal Maternity Hospital, for the period of two years, from 1844 to 1846, are recorded 1475 labors in the care of that charity, in which there were 4 cases of convulsions, or 1 in 354.¶

Cazeaux, in two thousand deliveries occurring under his care, at Hôtel Dieu and the hospital of La Faculté, met with but three cases of convulsions: 1 in 666¾.¶¶

The testimony of American obstetrical statistics upon this subject, as far as we have been able to collect them, is as follows:

Dr. James C. Bliss, in 820 cases of labor, encountered four cases of convulsions, or one in every 205 births.**

Dr. John Geo. Metcalf, of Massachusetts, in a statistical report of 927 cases of labor, reports 2 cases of convulsions, or 1 in 463.5 labors.††

Dr. H. Pleasants, of West Philadelphia, in 420 labors, had two cases of convulsions, or one in every 210 labors.‡‡

* British and Foreign Med. Chirurg. Rev., Oct., 1851, p. 442.

† British and Foreign Med. Chirurg. Rev., Jan., 1855, p. 40.

‡ Process of Parturition. By F. H. Ramsbotham, M. D. Philadelphia: 1855. pp 505-512.

§ Churchill's Diseases of Women. Philadelphia: 1857. p. 710.

¶ Simpson's Obstetric Memoirs, vol. i., p. 754.

¶¶ P. Cazeaux's Midwifery. Am. Ed. Philadelphia: 1857. p. 715.

** New York Journal of Medicine, Jan., 1847.

†† American Journ. Med. Sciences, Oct., 1847, p. 304.

‡‡ Am. Journ. Med. Sciences, April, 1848, p. 366.

Dr. D. Humphreys Storer, in a report from the Boston Lying-in-Hospital, describes the particular points of interest in 451 cases of labor, and among which convulsions occurred in three instances, or once in 150.33 labors.*

Dr. John P. Little, of Richmond, Virginia, in 45 cases of labor, met with three cases of convulsions, a proportion much higher than any of the statistics we have yet given.†

Dr. Daniel Pierson, of Augusta, Ill., in the statistics of 274 obstetrical cases which he has preserved, and given to the profession, details four cases of convulsions, or one in every 68½ cases of delivery.‡

Dr. Walter Channing, of Boston, in his work on Etherization in Child Birth, has collected from his own experience, as well as from the communications made to him by his professional brethren in Boston and vicinity, 574 *chloroform cases*, in which 10 cases of *convulsions* occurred, or 1 in 57.4. As these are select cases, given for the purpose of establishing the safety and utility of anæsthetics in labor, they, perhaps, ought not to be taken as any basis upon which to found a numerical calculation of the frequency of convulsive seizures; but at the same time, the limited period in which these observations were made, can scarcely fail to suggest to the mind a computation of the comparative frequency of this complication of the puerperal state.

The most common subjects of puerperal convulsions are women in their first pregnancies, the strong and healthy, perhaps, being the most liable.

* Am. Journ. Med. Sciences, Oct., 1850, p. 361.

† Am. Journ. Med. Sciences, Jan., 1851, p. 87.

‡ Am. Journ. Med. Sciences, July, 1857, p. 59.

NOTE. So far as the few American statistics which we have been enabled to collect upon this subject, prove anything, we fear that the evidence which they bear is, that puerperal convulsions are much more frequent in this country than in Europe. It is a subject not unworthy of the future study and notice of obstetrical writers, whether such be the fact, and to endeavor to discover, if possible, whether anything in our national habits, or physical, or mental peculiarities contribute to the predisposition of this complication of the puerperal state. We think that an examination of the reported cases would very plainly intimate that the disease for the past few years has been much more frequent than usual, if it be not upon the increase. In making a comparison, however, upon this point, the fact should not be allowed to pass unnoticed, that the European statistics are generally gathered from hospital practice, with its corresponding large aggregate of numbers; while our American statistics are from private practice almost exclusively, and perhaps, in a majority of cases, have occurred in the *consultation* practice of the reporters, which charges to their account, the cases occurring in their own practice and in that of their friends, and which would very materially add to the per centage of frequency.

Many of the subjects, too, are among the unmarried, a fact not unworthy of notice, as indicating a probable connection between the mental emotions of shame, grief and all these other sources of nervous disquietude from which the pregnant unmarried woman suffers, and the subsequent development of that intense disturbance of the nervous centres necessary to the production of a fit of eclampsia. The liability of primiparæ to puerperal convulsions, is abundantly proven by statistics, and is admitted by all observers of the disease.

Dr. Arneth, among 13 cases, indicates 8 as first pregnancies.*

Of 12 cases reported by Mr. Roe, 9 were primiparæ and 3 unmarried. Of the remaining 3, 1 was a third pregnancy, and the other 2 were twelfth pregnancies.†

The statements of Blot and Litzmann, exhibit the presence of albuminuria in 56 primiparæ out of 178, and in 22 multiparæ out of 159.‡

Prof. Simpson, in some published statistics, bearing upon this point, gives 233 cases of puerperal convulsions, occurring in the practice of different medical men, in which 178, or 76 per cent. happened in first labors.§

The seasons of the year appear to exert little, or no influence in the production of these convulsions, and females are attacked indifferently in all the months of the year.

As a general rule, puerperal convulsions are quite rare previous to the sixth month of pregnancy. As examples of the occasional early complications of convulsions, Cazeaux|| relates the following cases:

"M. Danyau, Sr., however, met with it in a young girl, who had only reached the sixth week, and in whom nothing but the extraction of the ovum could remove the symptoms. The eclampsia came on again in her next pregnancy, about the same period, and was followed by abortion; but in this instance, the fits continued for some time after abortion.

"A lady of Ferrara, about twenty-eight years of age, of a bilious temperament, and the mother of three children, was periodically attacked by convulsions as soon as she had conceived, and these attacks were renewed every two weeks through gestation; so that their appearance constituted in her a sign of pregnancy."

* British and Foreign Med. and Chirurg. Review, Oct., 1851, p. 442.

† Med. Times and Gazette, July 17, 1852, p. 61.

‡ Brit. and For. Med. Chirurg. Review, Oct., 1855, p. 427.

§ Simpson's Obstetric Memoirs, vol. i, p. 386.

|| P. Cazeaux's Midwifery. Second American Edition. 1857. p. 715.

Authors, as a general rule, have divided puerperal convulsions into three forms, the *hysteric*, the *epileptic* and the *apoplectic*; and have described the symptoms of each form with all that minute exactness, as if it were possible to make these hair-breadth distinctions at the bed-side, or as if their subsequent inculcations for practice were to be particularly governed by the ability to diagnose a particular form of convulsions.

We confess to our skepticism as to the ability of the physician to make these nicely drawn distinctions in the convulsions of the pregnant woman—and the uniformity of practice in the treatment of these cases which has heretofore attained among the profession, would seem to indicate, either the impossibility of making such distinctions, or else, that one form of treatment is applicable to all cases, and that no necessity, as a consequence, existed for the establishment of a differential diagnosis.

We cannot, therefore, but regard the divisions of the forms of this disease as adopted and taught by Dr. Murphy,* as more rational, and more in accordance with the true pathological conditions of the system at the time of the development of the convulsions, and as furnishing a better index to the indications for treatment, than the arbitrary adoption of an arbitrary name, which calls as arbitrarily for a peculiar and established form of treatment: or, in other words, we believe the adoption of the latter division of the disease, will be more likely to lead the physician to treat *symptoms* and *conditions* rather than *names*.

Dr. Murphy has divided this class of affections under the subdivisions of *sthenic*, or *hyperæmic*; *asthenic*, or *anæmic*; and *hysterical* convulsions.

This arrangement indicates the opposite conditions of the system in which convulsive phenomena may be exhibited, and suggests at once the very different forms of treatment which may be needed to meet each individual case.

It is time the term *apoplectic* was dismissed from our nomenclature, for our advanced state of pathology, has long since taught, that to be *apoplectic* is not necessarily to be *hyperæmic*; and that death may ensue as readily upon an *anæmic* condition of the system, and a want of a due and proper stimulus of the brain, as upon a condition of congestion of that organ.

It is not uninteresting, in studying the literature of puerperal convulsions to notice, how the writers have endeavored to preserve the peculiar diagnostic phraseology of the several forms of the disease as laid down in the books, and how far their treatment has after all, been governed by the actual con-

* Lectures on the Principles and Practices of Midwifery. By Edward W. Murphy, A. M., M. D. London: 1852.

dition of their patients. We think a commentary, upon the valueless character of an arbitrary nomenclature, even if it be sanctioned by venerable names and by those high in authority, might be easily framed from the evidence of these recorded cases, where the rational signs of each case have been met by a rational form of treatment, irrespective of the peculiar bias impressed upon the physician by preconceived pathological views and opinions.

The divisions which have been made in the classification of the several forms of this disease, to a certain extent, indicate the pathological views extant in reference to the causes of its production.

To a condition of congestion, or hyperæmia of the cerebral organs has been almost universally assigned the production of the convulsions peculiar to, or attendant upon, the puerperal state.

We do not deem it necessary to cite authorities upon this point. We think there will be no dispute of the truth of the assertion.

It is, perhaps, not unworthy of notice, that this view has been taken and accepted from the *symptoms* exhibited *during the life* of the patient, and while suffering under the convulsive seizures, rather than from *post-mortem* revelations of injuries inflicted upon the brain and nervous centres, or from the discovery of an actual state of congestion. Authors agree, that examinations *after death* throw little or no light upon the true pathology of this disease, that there are generally no traces left, or evidences furnished, as to the organs involved, and reacting, in the production of the convulsions. *The nervous centres at least, are no more frequently the seat of changes, and of organic lesions, than are the other organs of the body.*

We refer more particularly to the theory of congestion, from the important part it has had in directing and upholding the treatment practiced for the relief of these convulsive seizures.*

We now pass in the consideration of this subject, to a period when more correct views of the causes involved in the development of puerperal convulsions, and of the peculiar pathological conditions of the system under which they are developed, would seem to have been evolved.

Puerperal convulsions are now thought to be generally, though not

* We would refer those who are curious to trace out the pathological views, until lately held in reference to this subject, and who wish to enter into an examination of their soundness, to the work entitled "Parturition and the Principles of Obstetrics. By W. Tyler Smith, M. D., London. Published by Lea & Blanchard, Philadelphia. 1849." Lectures xx and xxi.

always, the result of changes in the blood, and produced in consequence of the toxicological effects of such alterations in the normal character of the circulating fluid; and that such blood-poison follows upon the non-elimination of some of its usual excretions.

Attendant upon this condition of faulty secretion, or excretion, as its early and constant sign, is the presence of *albumen* in the urine, and while such excretion takes place from the kidneys, there is retained within the circulation compounds usually eliminated by these organs, and of which the principal one is, probably, urea.

To this condition of the excretion of albumen, the term has been given of *albuminuria*; and to the symptoms especially chargeable to the blood-poison, and derived from the hypothetical part assigned to the retained urea, *uræmia*, or *uræmic intoxication* has been applied; and the latter term may, perhaps, be now regarded as a generic name applicable to, and covering all the symptoms growing out of this peculiar condition of the system.

We do not propose to discuss any of the questions, which a recognition of this condition has suggested in the pathological search after causes and the peculiar modes by which these impressions are expended upon the organism. Whether the poisoning is in fact occasioned by the retained urea, is a disputed question.

That a certain set of symptoms follow a condition of *albuminuria* is a well established fact, and from being generally referable to disease of the kidneys, has constituted a subject of study which has been most ardently pursued. And among the results of the investigations made to elucidate these points, not the least valuable has been the knowledge which has been evolved in reference to the causes concerned in the development of convulsions in the pregnant woman.

For more than fifty years the important fact has been noticed by authors, that there was a tendency in pregnant women, the subjects of anasarca swellings, especially of the upper extremities and face, to suffer from convulsions. This fact has been alluded to, and confirmed by the observations of Hamilton, Demanet, Duges, Burns, Montgomery, Ingleby, Johns and others. But they seem to have deduced no important conclusions from these observations, nor to have so connected them in their probable relations of cause and effect, as to render them valuable as means of diagnosis and the basis of a course of treatment, which should not only be instituted in the hour of actual suffering from this most terrific of all the accidents of the gestative and parturient state, but which should lead us to so far anticipate the probabilities of a convulsive seizure, that a course of preventive treatment

might be instituted which should aim to guard the patient from the impending fate which awaits her.

Prof. Simpson, of Edinburgh, seems to have been the first to recognize distinctly the conditions under which the state of anasarca led to, or predisposed to an attack of convulsions during the period of gestation, or in the act of labor; and to direct the profession in a course of investigations, the results of which, when we consider the important ends which they promise to serve in directing our treatment, not only as curative, but preventive of the convulsive seizures, deserve to be placed in foremost rank among the most valuable of the numerous additions lately made to our stock of pathological knowledge.

We deem the subject worthy of distinct record in this connection, of the successive steps by which a knowledge of these facts has been arrived at, and of according that credit to the several observers to which they are justly entitled, preserving the chronological order of their labors, so far as the limited number of authorities at our command will enable us to do.

Prof. Simpson says,* "Previously to my first course of lectures on Midwifery, in the University of Edinburgh, in 1840-1, I had, in more than one case, ascertained the œdema or anasarca seen in patients affected with puerperal convulsions, to be one of the numerous and important forms of dropsical disease which Dr. Bright had shown to be connected with the existence of albumen in the urine. Up to 1843 I had detected, in repeated instances, this connection of puerperal convulsions with albuminuria, but hitherto I had found it only by examination of the urine during life. In the spring of 1843 I saw a fatal case of puerperal convulsions, in which, in addition to the detection of albuminuria during life, I had an opportunity of observing the usual granular disease of the kidney on post-mortem examination.

"This case offered me the first opportunity of confirming, by inspection after death, an opinion that I had been led to adopt from the examination of the symptoms during life, and had publicly taught for the last two sessions, viz: that patients attacked with puerperal convulsions had almost invariably albuminous urine, and some accompanying, or rather preceding dropsical complication, and hence probably granular renal disease.

"My friend Dr. Lever, of London, who happened also to be directing his attention at the same time to the connection of puerperal convulsions with albuminuria, published in the number of Guy's Hospital Reports for 1843,

* Simpson's *Obstetric Memoirs and Contributions*, pp. 726-7.

several cases of puerperal eclampsia, in five of which he had found the urine to be albuminous.

"Since the above date (1843) I have seen a variety of cases of puerperal convulsions in consultation and hospital practice, and have always (with very rare exceptions indeed) detected the existence of albuminuria in the urine of the mother. In one or two instances I have found the kidneys presenting traces of recent acute inflammation; as pus, &c. Sometimes convulsions, or symptoms threatening them, recur in successive labors in the same mothers in connection with established granular disease. Usually, however, the state of albuminuria which leads to puerperal convulsions, is a transitory morbid condition, from which the patient recovers within the course of a few days after delivery; and the affection does not depend upon, or result in, any actual change of structure of the kidneys."

Dr. Lever prosecuted his investigations with such zeal, that in 1844,* he had remarked that in nine cases out of ten of puerperal convulsions that albuminous urine existed. He tested the urine of more than fifty women, drawn during labor with great care with the catheter, and the result was, "that in no case was albumen detected except where there had been convulsions, or their recognized premonitory symptoms. Urea was sought for in the blood in one instance, but not detected."

In 1847, Prof. Simpson,† in a communication upon the same subject, the result of further observation, draws the following conclusions:

"1. Albuminuria, when present during the last periods of pregnancy and labor, denotes a great and morbid *tendency* to puerperal convulsions.

"2. Albuminuria, in the pregnant and puerperal state, sometimes gives rise to other and more anomalous derangements of the nervous system without proceeding to convulsions; and I have especially observed states of local paralysis and neuralgia in the extremities, functional lesions of sight (amaurosis, &c.,) and hearing; hemiplegia and paraplegia more or less fully developed.

"3, Edema of the face and hands, going on occasionally to general anasarca, is one of the most frequent results of albuminuria in the pregnant female.

"4. The presence of cedema (3), or of any of the lesions of the nervous system (2), with or without the cedema, should always make us suspect albuminuria; and if our suspicions are verified by the state of the urine, we

* Braithwaite's Retrospect. Part x, p. 76.

† Simpson's Obstetric Memoirs and Contributions, vol. i, p. 733.

should diligently guard, by antiphlogistic means, &c., against the supervention of puerperal convulsions."

Dr. Mickschick* tested the urine of 26 women in labor, and detected albumen in the urine of five patients, one of whom was dropsical. Two women were attacked with convulsions, but albumen was found in the urine of but one of them.

M. Labatt has reported an interesting case where puerperal convulsions came on in a highly anasarctous woman, who at length sank into a comatose condition. By degrees, as the anasarca diminished under the influence of remedies, the albumen, with which the urine had been loaded, disappeared, and the intellectual powers returned.

In 1847, MM. Devilliers and Regnault,† presented to the Academy of Medicine of Paris, the result of their investigations upon this subject. They state that

"In this condition the affection presents much less distinct and well defined symptoms, most of which may be readily confounded with those of other diseases of pregnancy. Sometimes no morbid phenomenon manifests itself; and at others there may be heaviness, headache, general uneasiness, some characteristic derangements of the digestive organs; but no febrile action belonging to this disease in particular. Lumbar pains are so common in pregnancy, that we are unable to distinguish them either by their seat or nature from those which are developed during the acute stage of albuminuria.

* * * * * "The affection which especially presents itself as a frequent and important complication of albuminuria is eclampsia. Most of the subjects of puerperal convulsions exhibit evident marks of serous infiltration. In some, however, this symptom is absent; but the authors of this memoir have *constantly* found albumen in their urine. Of course *all the women exhibiting albumen do not become the subjects of convulsions*; and the authors have found these absent eight times in twenty cases; but they believe that more than a mere coincidence exists between the two diseases, founding their opinion upon the fact, that in ordinary albuminuria various cerebral and nervous phenomena are exhibited, and that during pregnancy these last acquire a special development.

"Contrary to what is observed in ordinary cases, the albuminuria of pregnancy may terminate in a rapid and complete cure after confinement, how-

* British and Foreign Medical Review, Jan., 1847, p. 289.

† Med. Chirurg. Rev., July, 1847. Quoted from Amer. Journ. Med. Sciences, Oct. 1847, p. 505.

ever grave the case may have appeared. It may pass into the chronic state, but this is more rare. * * * * *

"The authors observed 11 deaths in 20 albuminuric women. * * *

"They feel much disposed to accord to organic lesions much less importance than is ordinarily attributed to them, and to regard them rather as the effects than the causes of the disease. Indeed, in pregnant women its causes seem to be different from those generally admitted in ordinary albuminuria.

"The researches of these authors have proved to them that the blood of women during gestation exhibits a remarkable diminution of albumen, especially in the latter months; a condition which Andral has shown to be favorable to the production of dropsies in general, and one which bears the relation of cause to effect in respect to the present disease."

May 12th, 1849, at a meeting of the *Westminster Medical Society*, Dr. Cormack* read a paper detailing three cases of puerperal convulsions which had occurred in his practice. The main object of the paper was to point out the connection which exists, in a very great proportion of cases, between renal congestion and puerperal convulsions.

He considered puerperal convulsions to be—though not always, yet generally—the toxicological results of non-elimination of the excretions of the blood; and that, in by far the greater number of cases, this non-elimination depends on renal congestion, caused by the pressure of the gravid uterus. Oedema and albuminuria are frequent concomitants or precursors of convulsions, as shown by Dr. Lever and MM. Devilliers and Regnault.

Among the twelve cases of puerperal convulsions related by Mr. Rose, five had been preceded by albuminous urine.

Dr. Hecker† relates three cases of albuminuria in pregnant women, two of which had convulsions during labor. One proving fatal soon after delivery, and the other recovering rapidly. The *albuminous* patient, having no convulsions, presented thirty-six hours after delivery her urine clear, neutral and without a trace of albumen. She died three weeks after delivery, of peritonitis. The kidneys were pale, flabby and bloodless, and easily separated from the capsules; their tissue exhibited no change under the microscope.

Guy's Hospital Report, 1856,‡ contains the notices of twenty-seven cases

* Amer. Journ. Med. Sciences, April, 1850, p. 530. From London Journal Medicine, Nov., 1849.

† Brit. and For. Med. Chir. Review, July, 1854. p. 205.

‡ Guy's Hospital Reports. Third series, vol. ii. London, 1856, p. 428. Quoted from British and Foreign Medico-Chirurgical Review, July, 1857.

of puerperal convulsions; in twenty-one of these cases the urine was examined, and with one exception, found to be albuminous. In the exceptional case, the convulsions depended on arachnitis.

In Dr. Bliss's four cases of convulsions, all had bloated countenances, and more or less cedema in other parts of the body. In one of these cases the urine was albuminous.*

Such, then, is the character of the evidence by which the connection between the presence of *albuminuria* in the pregnant female and the production of *puerperal convulsions*, as the result of its toxæmic influences, is established.

The testimony is doubtless as full and conclusive as we could reasonably expect, when we remember how recently these views were first entertained, and the comparative infrequency of the manifestations of convulsions as a complication of gestation and parturition.

Amid the multitude of abnormal symptoms not unfrequently induced by the changes wrought in the animal economy by so important a physiological process as that of conception and the long subsequent period of gestation, not the least remarkable and interesting, is the disturbance caused in the healthy condition of the blood, and the addition of an element to the usual constituents of the renal secretion.

Albumen may be present in the urine of the pregnant female without the development of convulsions. Either the process of depravation may stop short of the point necessary to act upon the nervous system, or, the brain and spinal cord may not be impressible to the conditions of toxæmia present. An analogy may, perhaps, be found to the want of a response to the irritation of the toxicological condition of the blood, in ordinary tetanus. But, very few of the innumerable number who daily receive punctured wounds suffer from a development of tetanic spasm.

In reference to the comparative frequency of the albuminous presence as a complication of pregnancy, and of the proportion of such albuminoid subjects in which convulsions follow as a sequence, it will, perhaps, be sufficient to quote the following authorities. Upon this point the figures are necessarily limited, as the opportunities for a regular and systematic examination of the urine of the pregnant female are unfrequent. It is only when the suspicion of positive disease is entertained that such opportunities are generally afforded. To ascertain how far such changes exist, and yet exhibit no sign of their presence, is a problem of difficult solution.

* Ante p. 713.

Dr. Blot* found albuminous urine present in 41 cases out of 205, primiparæ being chiefly affected.

But 7 cases of convulsions were developed in these 41 cases of albuminuria.

Dr. Litzmann examined the urine of 131 females: 79 during pregnancy, 80 during labor, and 80 after delivery. He found albumen present in 37, and absent in 95.

Of the 95 whose urine contained no albumen, 53 were primiparæ and 42 multiparæ.

Of the 37 who had albuminuria, 26 were primiparæ and 11 multiparæ; 2 were pregnant with twins.

Of the 37, the urine of 16 was found to be albuminous during pregnancy; in 10 of these the albumen continued some days after labor; in 4 it disappeared before confinement.

In 4 women in whom albuminuria was found after labor, it had probably existed during pregnancy, although the urine had not been examined.

MM. Devilliers and Regnault report 12 cases of convulsions in 20 albuminuric subjects; and of and among these 20 cases, there were 11 deaths.†

In a recent paper upon this subject by M. Imbert-Gourbeyre, he gives 159 cases of albuminuria which have been observed in modern times, where there were 94 cases of eclampsia.‡

Positive organic renal disease is undoubtedly present in many of the cases, which may have existed previous to pregnancy, and been hastened to a full and fatal development by the conditions of gestation. Or irreparable injury may be inflicted upon these organs by the long continued congestion to which they are subjected. The unfavorable character of the prognosis in such cases is sufficiently evident.§

Happily, in a large proportion of the cases, the presence of albumen in the urine is not owing to such serious pathological changes. Renal conges-

* Amer. Journ. Med. Sciences, April 1853, p. 537.

† Med. Chirurg. Review, July, 1847.

‡ Brit. and For. Med. Chirurg. Review, Jan., 1868, p. 88.

§ Note. Prof. Simpson has published the account of three fatal cases of puerperal convulsions: one occurring during labor; the second, the first fit happened a month before delivery; the third, eclampsia supervened seven weeks after labor and the apparent perfect recovery of the patient. In two of these cases there was positive evidence of organic change; and in the third, a whitish turbid fluid was found in the renal pelvis, looking like pus. See American Journal Medical Sciences, January, 1848, p. 88.

tion simply, is regarded as sufficient for its production, induced most frequently by the pressure of the gravid uterus. The perfect recovery of the patient after delivery, is proof of the absence of serious organic changes in the kidneys, such as is generally known as Bright's disease.

Mechanical pressure, in which is included the resistance offered by the tense, unyielding abdominal walls of most primiparæ, is we believe, admitted by most writers upon the subject, to be sufficient to develop the presence of albuminuria. The tight girding of the abdomen often practiced as a measure of concealment, by those pregnant out of wedlock, has been adduced as an additional means of exerting injurious pressure. The fact of the artificial production of albuminuria by the ligation of the renal veins, is cited in evidence of the morbid results likely to follow from arrest of the due circulation of the blood.

The sufficiency of mechanical pressure in whatever way induced, to develop albuminuria, is admitted by Simpson, Lever, Cormack, W. Tyler Smith, and Litzmann.

Five of Litzmann's patients who had albuminuria, were pregnant with twins.

Dr. W. Tyler Smith has thus graphically described the results of pressure. He says, "It was necessary to take a comprehensive view of the causes of blood-poisoning dependent on the pressure of the gravid uterus. There was the pressure on the intestinal canal, causing constipation; there was the pressure upon the emulgent veins, causing albuminuria, and the retention of urea in the blood; there was the pressure upon the hepatic vessels, which he had frequently observed to produce pink deposits in the urine; and lastly, there was deficient oxygenation of the blood from pressure upon the thoracic viscera.*"

In a later paper upon the subject, Dr. Smith observes: "I have seen it occur in primiparous women of relaxed habits, as early as the fourth or fifth month, where the abdominal walls were flacid, and no apparent pressure or tension existed. The disease appears to me in such cases to depend upon sympathetic irritation of the kidneys by the gravid uterus, similar with the irritation of the salivary glands, the mammæ, thyroid, &c., and not upon mere pressure."†

We could scarcely expect the opinion as to the sufficiency of renal congestion for the production of these several symptoms, to be accepted without

* Med. Gaz., June 15, 1849, as quoted in Braithw. Retrospect, Part xx, p. 198.

† Lancet, March 1, 1856, p. 221.

any dissenting voices, and we accordingly find this position attacked by such men as F. Wiegner, P. Cazeaux, and Imbert-Gourbeyre, who all contend for positive organic changes as necessary to the production of eclamptic seizures; but it will not escape observation, that what constitutes the essential character of these organic changes is a question which they are not agreed upon among themselves.

Dr. F. Wiegner,* maintains "that up to the tenth day of the puerperal state, anatomical lesions are always found; and that profound alterations of the kidneys are more frequent than congestive conditions. That the kidneys cannot pour out albumen in any considerable quantity, or during a certain time, without becoming clogged up and diseased."

Cazeaux† contends for the necessities of a Bright's disease to develop puerperal eclampsia, but he refines his etiology of the former disease so far, as to insist that Bright's disease does not primarily or mainly depend upon positive, or recognizable changes in the anatomical character of the kidneys, but that Bright's disease is primarily a change in the character of the blood, and that albumen may be excreted by the kidneys without appreciable changes in these organs.

M. Imbert-Gourbeyre‡ contends "that puerperal albuminuria is neither more or less than Bright's disease, (improperly called albuminous nephritis,) there being a puerperal Bright's disease just as much as there is a puerperal pneumonia or peritonitis. Moreover, puerperal eclampsia is nothing else than puerperal Bright's disease, in which convulsions occur; or in other words, the eclampsia is really sympathetic of Bright's disease."

The weight of opinion is, however, as we have previously stated, that this albuminoid condition is most frequently independent of any anatomical lesions, and results simply from renal congestion, and that the kidneys resume their normal functions in a few days after the removal of the disturbing causes by delivery.

Dr. Braun§ gives the alterations which the normal proportions of the constituents of the urine undergo in uræmic eclampsia, as follows:

"The uric acid is diminished.

"Urea diminished or almost wanting.

* British and Foreign Med.-Chirurg. Review, Oct. 1855, p. 27.

† Cazeaux's Midwifery. Sec. Albuminuria, p. 283.

‡ Prize Paper: Puerperal Albuminuria. Mémoires de l'Académie de Médecine, 1856. Quotation from Brit. and For. Med.-Chirurg. Review, Jan., 1858, p. 86.

§ Brit. and For. Med.-Chirurg. Review, Jan., 1855, p. 42.

"Chlorides but little altered.

"Sulphates and phosphates either diminished or increased.

"Uroxanthin increased.

"The specific gravity of the urine varies from 1010 to 1030. If the sediment of the urine be examined in the first twenty-four hours, blood and mucous corpuscles and epithelial scales will be found, but these disappear when decomposition ensues. The more acute the disease of the kidney, the more cloudy the urine, and the greater the number of blood-corpuscles. The urine is generally acid, and gives its characteristic deposit with heat and nitric acid."

Symptoms. The period at which the renal affection commences in pregnancy, is unknown. It usually begins insidiously and increases slowly. The only constant sign by which renal disorder is denoted, is exhibited in the condition of the urine. Devilliers and Regnault have observed albumen in the urine at the sixth month; Litzmann not before the eighth month. Dr. W. Tyler Smith has seen it as early as the fourth or fifth month.

Cazeaux says he once detected it at four months in a greatly infiltrated primiparous female, who was delivered at six months of a still-born child, and whose urine was slightly albuminous eighteen months afterwards. M. Bach, of Strasbourg, says that he has seen it at six weeks in a very nervous person. M. Cahen mentions three cases in the fifth and sixth months, and M. Bach two others.

The quantity of albumen is usually very conspicuous, and increases as the time of delivery approaches. In proportion to the intensity and duration of the morbid process in the kidneys, are found casts of the uriniferous tubes in greater or less quantity, the epithelium lining them being sometimes normal, sometimes in a state of fatty degeneration. In the milder cases, the tube-casts are often found just at delivery, or soon after.

Lumbar pain is frequently present, but not so constant as to be diagnostic. Dr. Litzmann has found tenderness on pressure over the kidneys in nearly all the cases—this condition not being observable in pregnant females whose kidneys are unaffected. The patient complains of headache, and sometimes of dimness of sight and of amaurosis, and there is general pyrexia.

Dropsy may be entirely absent, but it is generally present. When present, the development of the dropsy is sometimes rapid and acute, but is generally gradual. It may be limited to the lower extremities, but it usually extends to the upper extremities and face; the precipitate of albumen being as great in the one case as in the other. The œdema may vary from mere

puffiness to excessive distension, and may invade the splanchnic cavities. In the progress of the disease to its fullest severity, the legs become excessively swollen, and the vulva and vagina so tumid as to render an examination difficult. There is puffiness of the face and hands, cedema of the abdominal walls, and almost every part of the body pits deeply on pressure. Cedema of the upper part of the body, the hands, arms and face is regarded as a most unequivocal sign of renal disease.

The amount of cerebral disturbance in some of the cases is very considerable, as manifested not only by headache, but by disturbance of vision, which may range from slight dimness of sight to complete amaurosis. The cerebro-spinal symptoms which precede the attacks of uræmic convulsions, bear the closest resemblance to those of Bright's disease. Upon the frequency of these symptoms, as well as such other general disturbances of the system, as he calls premonitory symptoms, Dr. Wieger* has collected the following figures: "In seventy-eight cases of Bright, Barlow, and Frerichs, there was amurosis and amblyopia ten times; syncope nineteen times; singing in the ears and deafness ten times; convulsions fourteen times. Out of one hundred and forty cases of eclampsia collected into a table, forty-three showed premonitory symptoms. Of the cases in which the eclampsia broke out before labor, there were forty per cent.; of those in which it began during labor, thirty per cent.; and of those in which it began after labor, twenty per cent., which were attended with premonitory symptoms. As premonitory symptoms, the author enumerates vomiting and diarrhoea, but principally headache, disturbance of intellect, and often delirium; cramps and amblyopia, sometimes followed by blindness, not unfrequently precedes. The changes of the pulse and pupils were too uncertain to be considered."

Notwithstanding the close connection of all these symptoms with a condition of albuminuria, and a uniformity of sequence so constant as to be well regarded in the order of cause and effects, Dr. Litzmann declares he has several times seen cedema of the extremities, including even the upper part of the body, the hands, arms and face, accompanied sometimes even by headache and transient disturbance of vision, when there has been no albumen in the urine.

The absence of albumen in these cases is, perhaps, no more remarkable than the two cases cited by M. Depaul, "in which, having examined the urine before labor without finding any albumen present, convulsions broke

* Brit. and For. Med.-Chir. Review, Oct., 1855, p. 427.

out; and the urine was found to contain albumen after the second fit in the first case, and after the fourth fit in the second case."

M. Imbert-Gourbeyre says, "at the present time, it is incontestable that puerperal eclampsia may exist without albuminuria."

Cazeaux admits the *bare possibility* of the development of convulsions without the presence of albuminuria; a form of expression intimating his doubts, after all, of its occurrence.

Treatment. The treatment of puerperal convulsions, the most readily accepted, and the form long prevalent, could be no other than that inculcated by the theories taught and accepted as to their cause. Fortified by a pathology which looks to a condition of congestion as the exciting, or at least, predisposing cause of these convulsive seizures, the treatment which almost as a matter of necessary sequence flowed from it, is one of depletion,—blood-letting and evacuates are the means to be employed as a necessary consequence of this view of the causes concerned in the production of these convulsions.

Gooch says, "Bleeding is our sheet-anchor, in *whatever class of patients* the disease may occur; and to be efficacious, it must be employed boldly and speedily, and to a greater extent than is generally imagined. * * * I can now conscientiously declare, that I never had a patient die of puerperal convulsions when the disease has been thus boldly treated; those who have died have been bled with a sparing hand, and to an insufficient amount."*

Prof. C. D. Meigs says, "It is scarcely worth while, almost, to open a vessel to draw off eight or twelve ounces of blood. The patient ought to lose from thirty to sixty ounces at one venesection, if possible; and if signs of faintness appear they should be hailed as the harbingers of success."†

But in reference to *treatment*, it is the more especial duty of your committee to collect the facts having reference to the employment of *chloroform* and the other *anæsthetic agents* among the remedial measures in the management of puerperal convulsions, and to estimate, as far as practical, their value either when associated with other means, or employed alone as curative agents.

No better method of accomplishing this object has occurred to your committee, than to collect as far as practical, the cases in which this treat-

* Practical Compendium of Midwifery. By the late Robert Gooch, M. D., p. 233. (The italics are our own, used by way of emphasis.—COMMITTEE.)

† Obstetrics, the Science and the Art. By C. D. Meigs, M. D., 1852, p. 458.

ment has been employed, as they are scattered through our medical literature, or as they may be communicated through the kindness of friends directly to the committee.

In no other way can the different phases of the disease, or the peculiar circumstances surrounding each case be so well exhibited. We only regret, that so many of the cases are so imperfectly reported as to detract much from their real value as means of instruction; and that the resources at our command are not such as to enable us to furnish as connected a series in the chain of evidence as we could wish.

It will be observed that but few of the cases are pure chloroform cases. In the greater part, chloroform, or ether has been employed only as an adjunct to other measures. In the majority of the cases, blood-letting has preceded the use of the anæsthetic agents, and the chloroform been employed rather as a secondary than a primary means of cure. In some of the instances, however, such has not been the case, but the anæsthetics have been employed for the direct purpose of quieting the nervous system, without the intervention of the lancet.

At the conclusion of these cases we shall endeavor to analyze them, and present in a connected order the lesions to be learned from their study.

We propose to present the cases as far as possible in their chronological order, as indicating the successive steps by which this mode of treatment has been introduced. This will account for the mingling of foreign and home reports.

CASE I. W. J. Kite, Esq., of Hatfield,* relates a case of puerperal convulsions, in which chloroform seemed to exert a most beneficial effect.

The patient was thirty years of age, and in her second labor. After irregular pains had existed for about twenty-four hours, she was seized with convulsions; bleeding was employed, but the convulsions continued. In about thirteen hours more, the membranes having been ruptured for some time, the os dilated to the size of a crown piece, and the convulsions still recurring at short intervals; Mr. Thomas suggested the inhalation of chloroform, as the most likely means of affording relief. A sponge containing chloroform, was held to the nose, and its effects were soon visible. In less than five minutes she became perfectly quiet, and the convulsions ceased. In ten minutes, contractions of the uterus came on, and continued regularly; the head of the child gradually advanced, and as it descended into the vag-

* Braithwaite's Retrospect, Jan., 1848, No. xvii, p. 320.

ina, the hæmorrhage ceased. In one hour and a quarter from the first inhalation, the influence being kept up the whole time, she was delivered of a male child, and without having any recurrence of the convulsions. The inhalation was now discontinued. The placenta followed in a few minutes; the uterus contracted, and no hæmorrhage followed.

CASE II. Mr. Fearn, of Derby,* has also given chloroform with excellent effect, in a case of puerperal convulsions. The woman had been insensible during the whole day, with frequent convulsions, which ceased almost immediately after the chloroform took effect; and when completely under its influence, she was delivered with the crotchet.

CASE III. Mr. Clifton, of Welwyn,† relates another case in which it was equally efficacious. Notwithstanding the most violent convulsions, the woman sank into a tranquil sleep in a minute or two after its use.

CASE IV. *Reported by Samuel Cabot, M. D., of Boston, Mass.‡*

March 13, 1848. Mrs. H., strong and healthy, 27 years of age. Married at seventeen; mother of four children. Always has had very short and easy labors of about ten minutes duration. Supposed herself to be at about the full period of gestation. Fell upon her back with considerable violence,

* Braithwaite's Retrospect, Jan., 1848, No. xvii, p. 330.

† Ibid.

‡ A Treatise on Etherization in Child-Birth. By Walter Channing, M.D., Boston. 1848. Page 393. The Report is also found as Case LV, p. 251.

NOTE. So far as we have been able to learn from the reported cases which we have examined, this is the first instance in which anæsthetics were administered in puerperal convulsions in America; but so far as our knowledge extends, it was not given to the world until Dr. Channing published it in his "Treatise on Etherization in Child-Birth," which work was not issued until towards the end of the year 1848.

We believe the succeeding case of Prof. J. P. White, of this city, to be the *first published American case* of the use of anæsthetics in puerperal convulsions; and we know he suggested its use, and administered it without being aware that it had been previously employed in such cases by any person.

We make this reference actuated by our sense of local pride, which prompts us to secure for the members of the profession of our city every claim to which they are justly entitled; as well as from a desire to accord full justice to the claims of an individual member of the profession, for the introduction, or sanction of a remedial measure, promising to be of so much value in these cases.

about a week before and had had some nausea, with uneasiness in head, from that time.

At 8, P. M., March 13th, was found upon the bed in a violent convulsion, blood flowing in considerable quantity from mouth; convulsions recurring every fifteen minutes. Was seen by Dr. Cabot at 9 o'clock. The muscles of head, chest and arms principally affected, diaphragm also; left side rather more than right. Left pupil dilated. Head of child very high, and mouth of womb not felt. Took sixteen ounces of blood from arm. Ice to head and sinapisms to feet. Pulse strong and full before venesection; small and feeble after. In about thirty minutes after venesection, recovered senses for a short time, so as to answer questions coherently. Had another convulsion at an hour and a half after venesection. Bled her again at 11½, to ℥xviij. After venesection, quite pale; pulse small and weak; pupils fixed, and rather contracted, but equally. In an hour, had another fit; and one each successive hour, for three hours; then becoming oftener, until once in twenty minutes.

At 3½ o'clock, A. M., 14th March, Dr. C. applied, at the apparent commencement of a convulsion, a sponge, saturated with *sulphuric ether*, over her mouth and nose. The spasmodic action soon ceased; and in about three minutes she was in a deep sleep. The head of child was somewhat advanced; could only reach anterior part of neck of womb; rather soft and much shortened. Ether was used at every threatening convulsion. Almost immediately after patient was obviously etherized, regular labor-pains commenced, and continued at short intervals, until at 6, A. M., the child was born alive. Ergot, grs. xx, was administered, as womb did not contract well.

After the birth of the child, patient slept quietly about an hour; then had another convulsion, there having been an interval of nearly four hours since last spasm. Ether was again used; but pulse became so feeble and small before any effect could be produced, that it was discontinued, and an enema of tinct. opii, ℥j, and pulv. asafoetid., ℥j, in half a cup of starch was administered; and hyd. submur., grs. xv, given by the mouth. After this, patient slept quietly for three hours, then had a convulsion every half hour, until 2, P. M.; when after considerable difficulty, got down tinct. opii, gtt. xxx, pulv. asafoet. grs. x. Had one more convulsion soon after taking it, and then slept quietly for two hours; and then beginning to move as if about to have a convulsion, gave her tr. opii and asafoet., as before; and after a few struggles not amounting to convulsions, became again quiet, and remained so until about half past five, when, after having taken some senna and salts, convulsions again came on: the first continuing about half an hour, and

hardly ceasing before another commenced, which lasted about the same time; then a short interval, and then another not severe convulsion; after which, she had no return of them, and the case progressed favorably, with a perfect recovery. (*Condition of urine not noted.*)

CASE V. *Reported by Prof. James P. White,* Buffalo, N. Y., July 18th, 1848.*

Case occurred in the practice of Dr. Devening. The patient, an Irish woman of full habit, in her third labor; her two previous deliveries had been accompanied by no unusual symptoms. Prof. White in consultation.

The convulsive paroxysms succeeded each other with great rapidity; the face flushed and the pulse full. Full *bleeding* was performed twice, but the convulsions continued with but slight diminution.

Prof. W. advised and administered chloroform. The muscular agitation, which before could not be controlled, now subsided, and delivery of a pair of twins was effected without difficulty; both children living and doing well. The recovery of the patient was rapid and complete. (*Condition of urine not noted.*)

Dr. Walter Channing, in his work upon Etherization in Child-Birth, has given the particulars of 79 cases in which anæsthetics were administered, during the different stages and in the different complications of labor. Eight of these cases were *puerperal convulsions*.

As Dr. Channing has been not only an ardent advocate of the safety and propriety of the administration of anæsthetic agents in obstetrical practice, as well as the diligent student in collecting such facts as would serve to sanction its use from the experience of the profession, we deem no excuse necessary to refer to such evidence as he has furnished us of its safety and utility in modifying and controlling the convulsive seizures of the pregnant and parturient female.

We shall condense these cases as much as possible and give their principal points of interest only.†

* Buffalo Medical Journal, vol. iv, Sept., 1848, p. 206.

† NOTE. If any apology to the Association, for occupying its time with the recitation of cases which are already made accessible in book-form to the profession, be necessary, we reply, we know of no other way of preserving and presenting the historical order in which these agents have been made to assume a rank among the remedial measures applicable to the treatment of puerperal convulsions. Besides,

CASE VI. (Case 57, page 254.) Aged thirty-three; three children at full time; one at seven months, accompanied by profuse hæmorrhage, and three abortions. Is now seven months pregnant. Has had poor health during the whole time. Has gradually become *universally* and *greatly anæsthetic*.

On the 9th, severe headache; took but very little food. Headache increased, P. M.; and at about 1, A. M., of 10th, was seized with convulsions. Got active enemata soon, and inhaled sulphuric ether. Great excitement followed, becoming almost uncontrollable. Chloroform was substituted for ether, and the change in things was almost immediate. Great quiet took place; and though fits continued, their intervals were long, and she was partially conscious during them. Headache continued.

Attempts had been made to bleed, but failed. Leeches applied to temple. Chloroform continued.

Dr. C. saw the patient between 4 and 5, A. M. The convulsions recurred at long intervals, with violence. Some consciousness in the intervals. Os uteri closed, very high up.

About twenty ounces of blood were drawn from a large orifice. The leech bites continued to discharge blood quite freely. Chloroform was in use at the time; and after an inhalation, the bleeding ceased entirely, and did not recur. Convulsions continued as before; and it was now agreed to employ antispasmodic and narcotic remedies; the tinct. opii, and emulsion of assæfet., one drachm to an enema, and from thirty to forty drops of the former. These obviously, for a time, checked the convulsions; and at length, about 10, P. M., after various experience of their use, the fits ceased entirely and did not recur. She had a perfectly quiet night, and on the morning of April 11, was comfortable and conscious. On the day before sub. mur. hydrg. grs. xv, had been taken. *Renal secretions natural*.

12th. Bowels moved sufficiently. Night comfortable. Child born dead at 12 to-day, at noon. Recovery perfect.

CASE VII. (Case 1, page 261.) May 7th, about 4, P. M., was seized

as we have already shown, so firmly fixed is the congestive pathology, and depletory treatment of this disease, in the minds of the profession, no damage can be done in accumulating evidence upon a point, which if sustained by testimony and experience, promises to introduce a less sanguinary, and no less successful form of treatment.

with most severe pain or cramp in the stomach, without any error in diet, or from any known disease, or change from ordinary health. In the evening, convulsions. These were very severe. They had been preceded by that state of stomach to which Denman and others ascribe such important agency in the production of this most formidable disease. For a time, some consciousness occurred between the fits. This was not of long continuance. Blood-letting, and leeching to head, were practiced. But the skin was pale and cold, and the pulse feeble; and much blood was not taken,—and this with very little, if any, relief.

Chloroform was inhaled, but did not diminish the violence, or increase the intervals between the fits. These, for the most part, were about half an hour; once, an hour and a-half. *Urine*, drawn by the catheter, showed some striking deviations from health. It was of a blackish-brown color, not at all resembling urine; and in smell still more unlike it, being entirely destitute of urinous odor.

First seen by Dr. C. between 12 and 1, noon, of the 8th. She was perfectly unconscious; breathing heavy and noisy; pulse very rapid, small, wiry; much heat especially about the face. The face was swollen, leaden, pale, and haggard. *Anasarca* existed everywhere; her lower extremities were especially swollen. Labor had begun. Os uteri dilated somewhat, and distensible.

A violent fit soon came on. During the height of the fit, the pulse at the wrist was wanting. As chloroform had not controlled the fits, sulphuric ether was inhaled. For a short time, the intervals were lengthened; but after this, the fits became as frequent, and more so than before. Labor had advanced, but the state of the patient was obviously growing worse. The disease had now existed many hours and was obviously increasing. The membranes were punctured. Some temporary diminution of the fits followed, but soon became as pronounced as ever.

The child was delivered by instruments, and during the operation and for some time after, fits did not occur; the pulse improved, was slower, and gained strength; breathing was good, and lividity entirely disappeared.

Convulsions recurred soon after, but ceased again. She sank gradually and death took place forty-eight hours from the birth of the child.

CASE VIII. (Case 69, page 278.) Mrs. —, aged eighteen; first labor. Was taken with distinct uterine contractions, July 21st, at about 11, P. M. Had slept badly, and had irregular and painful uterine action for three or four preceding days. Labor had advanced very favorably, though

with much complaint, till 9, A. M., of 22d; when without any observed precursors, except very slight headache, convulsions occurred. In the intervals between the first four fits, consciousness returned. The jaw was dislocated during one of these attacks, and the difficulty was pointed out by the patient. Reduction was at once accomplished, but partial dislocation occurred twice afterwards. After the fourth convulsion, consciousness did not return. The labor made steady progress, and at noon, a boy of large size and alive, was born. The labor was completed during the sixth convulsion.

Extreme restlessness accompanied and followed the contraction which terminated the labor, lasting an hour. This violent action ceased as the next fit manifested itself; and from this time, there was alternately a fit, and an attack of excessive restlessness, similar to the first above described.

The treatment consisted in blood-letting, a solution of tart. antimon., iced water to the head, and leeches to the temples.

The convulsions continued, and increased in violence and in frequency; and about 6, P. M., Dr. C. was called in consultation.

The pulse was rapid, between 130 and 140, and not deficient in strength. The skin was very hot, and perfectly dry. The face was generally pale, the lips being quite red. The eyelids were naturally closed, and a state of rest or of quiet sleep which Dr. C. had rarely observed in genuine puerperal convulsions. Unconsciousness entire. The abdomen was full, partly owing to flatus; but a portion was produced by the womb, which was very large, extending above the umbilicus, and very hard. Urine has been passed during the day. A fit soon came on; accompanied by distinct uterine contractions, with evidences of pain in that region.

Ten grains hyd. submur. were given, and the administration of sulphuric ether commenced. The ether was renewed three times in the course of an hour. There was unconsciousness before inhaling it. The principal change observed was the greater quiet, and the increased length of the interval between the fits after inhalation.

She had a fit in about an hour after etherization. The pulse was now more frequent, smaller, and the convulsion very severe. Asafoetida, 3j. and tinct. opii, gtts. xxx, in an emulsion, by enema, was now given and retained. Quiet was now decidedly greater after the enema. Gentle sleep, with very easy breathing, came on. The complexion and expression were more natural. The last convulsion was at five minutes before 7, P. M. Another injection of asafoet. et tinct. opii, was given at about 10. The catheter was introduced and much *dark colored urine* drawn off.

23d. Night tranquil; no convulsions; takes drinks readily. At visit

between 5 and 6, A. M., pulse from 96 to 100, of good strength. When called by name, answered, "What?" Flatus has been freely discharged, but no dejection. An enema, followed by ol. ricin., if required, was directed. A pint of urine, similar in appearance to that before drawn off, was removed by catheter.

24th, 8, A. M. Report of day and night favorable. Five dejections. Pulse 108, soft, sufficiently full. Countenance and manner natural; takes food with relish; semi-consciousness. Answered a question, though not disposed to do more. Catheter.

25th. Better.—Recovery perfect.

CASE IX. (Case 71, page 285.) Aug. —. Aged twenty-seven; first labor; seventh month. Anasarous to an unusual extent; lower limbs especially, enormously swollen. Has lately had paroxysms of severe distress in the epigastrium. Eat indigestible food for supper, and woke in the night with acute pain in the stomach, and took laudanum for same, with relief. Very soon after, was seized with severe pain in the head. Violent convulsions soon occurred. Imperfect consciousness continued a short time after the attack.

Was bled about forty ounces from a large orifice. The pulse became small, weak; face pale; respiration feeble: the whole state showing approaching syncope. There was very little, if any, change in the fits; an hour for the most part recurring between them; but not the slightest consciousness manifested itself in the intervals. Enemata, laxative and quieting, were given,—cold, assiduously applied to the head,—attempts made to get medicine into the stomach.

Labor at length occurred, and the membranes gave way.

At about 6, P. M., visited by Dr. C. Found her in apparently easy sleep; no stertor nor apparent trouble in respiratory apparatus or function. The complexion was clear, and no lividity anywhere noticed. The os uteri could be barely reached; it admitted the finger and moderately dilatable. Supposed labor to be present, and that it would be accomplished by nature, or art easily. As nothing was to be done immediately, left the patient to the care of her physician.

Dr. C. learned that after other means had been faithfully tried, and without the least apparent benefit, that sulphuric ether had been inhaled. At first, inhalation was attempted *during the convulsions*; but it was in vain to use it at this time, for ordinary respiration was then almost impossible. Inhalation was next tried in the intervals of the fits. The change which fol-

lowed was in the length and the severity of the convulsions, these becoming less; and from 6, P. M., she had no more fits. Labor now advanced; and about 8, P. M., was terminated by instrumental aid. No improvement followed; and about 5, A. M., the next morning, death took place.

Reference is made to the attendant circumstances of the universal and excessive anasarca and the violent pain of the stomach, preceding the attack, by the reporter.

CASE X. (Case 77, page 287.) Age twenty; first pregnancy, end of ninth month.

Aug. 12th, about 11, A. M., called in consultation. Learned that Wednesday night, 9th, was passed without sleep, and great restlessness and without apparent cause. Thursday made no complaint. Eat much food, which was strongly craved. In night was seized with intense headache, most severe in forehead, and represented by patient to be insupportable. At 2, vomiting occurred. Matters vomited, were large quantities of bile, of dense mucus, and portions of food perfectly undigested. The night had, like the preceding one, been passed without sleep, and in continuous suffering.

Between 8 and 9, A. M., of the 12th, was visited by her physician, and was seized in his presence with a convulsion. It was very violent, exactly resembling epilepsy, producing great and general agitation and livid face and hands. Heavy coma, with deep apoplectic stertor, followed. She had been in perfect health during the whole of pregnancy, and become fleshy and plethoric.

She was immediately bled, and no improvement following, at 11, A. M., Dr. C. was called. A fit had just ended. Heavy stertor; respiration much embarrassed; skin hot, dry; face swollen, flushed; pupils contracted to a point; head hot; pulse rapid, but strong and hard. Dilated and very dilatable os uteri; labor present. Bled about twenty-four ounces more.

Relief followed venesection. Pulse, breathing, and general state of the patient, showed improvement. The skin became cool; flush subsided; pulse was slower; and perspiration was present. Labor was progressing.

Sulphuric ether was now inhaled with a view to prevent recurrence of fits. It was not well breathed, and it rarely is in the intervals between genuine puerperal convulsions. Respiration is always more or less disturbed at such times, or, if not obviously thus, is often rendered so by any external cause of embarrassment. Inhalation was cautiously continued for half an hour or more. The pulse became slower, being 120 instead of 144, the number after last convulsion.

A fit at 1, P. M., an hour and a-half from the last. This was comparatively slight, and was succeeded by less heavy coma and stertor, and a less morbid expression of countenance. The interval was half an hour longer than before etherization.

It was agreed to omit inhalation; to observe the progress of the case; and to aid delivery give an infusion of *secale*. The labor advanced very favorably. Increasing consciousness of uterine contractions, and some of the ordinary expressions of the pain of labor. And at length, the patient so far recovered perception, as to recognize her mother, and to call her name. Had not met with a better promise in any case of the kind, nor seen any more severe.

This favorable state and gradual improvement had now continued for three hours, it being 4, P. M. A fit very suddenly came on, just at this time. It was the most severe one which had occurred. It lasted longer, and in its violence threatened immediate extinction of life.

It was agreed to remove the child, which was accordingly done; and it was still-born.

Very little improvement followed delivery. Respiration continued embarrassed, and very slight return of consciousness was noticed. Injections of *asafetida* were given; a sinapism applied to the epigastrium, and skin cooled by use of cold water.

At 7, P. M., a slight fit. *Tinct. opii* was now added to the injection. More quiet.

At 1, A. M., another but very slight convulsion, and this was the last. There was, however, no amendment in the following interval of disease; and at 1, P. M., of the next day, she died.

CASE XI. (Case 20, page 198.) Sept. 13th. Mrs. — was taken with pain in abdomen, resembling labor pain, but more like colic. Had severe cholera morbus in night. Next morning took castor oil and an injection, and was thoroughly purged. At 12, noon, was taken with convulsions.

This is her third pregnancy, period seventh month. In her first, she had convulsions at the seventh month, and was delivered by natural effort. In the second, at about eight months, had convulsions, and was delivered by the womb. Her physician, finding she had suffered before fits with severe headache, and was deeply red in the face, bled her largely. Her fits, however, continued very strong, not at all diminished by bleeding and previous purging.

Dr. C. saw her about 6, P. M. She was in a very excited state, talking

constantly, and tossing herself about vehemently. Her face and lips deadly pale; skin cold; pulse rapid, 150 in a minute. Every thing showed a state of extreme exhaustion, still with remaining power to make great *muscular* exertions. No pains; slight dilatation of os uteri, but soft and dilatable.

She soon had a fit, a violent convulsion, followed by deep stertor and stupor. She came out of this in about seven minutes, and began to talk, and to throw herself about. This state continued. The membranes were ruptured; the womb did not act. The intervals of convulsions lessened. The pulse sunk. She lost power to speak or move, and lay wholly unconscious on her bed. It seemed impossible that she should long survive this state of things, and it was decided that an attempt should be made to deliver. The head was perforated, and after a long trial, the fetus was removed. She had two convulsions during the operation.

Left her quiet at 2, A. M. of the 14th.

14th. Fits occurred after Dr. C. left. In the morning was very much exhausted. Pulse very rapid. Great restlessness. Apparently threatened convulsions. *Ether* was now for the first time employed. She soon became calm. Had two slight fits afterwards; but in the course of two or three hours fell asleep, and had a long and quiet repose. No more fits; but as they were again threatened, inhalation was employed, and with the best effects. At 7, P. M., was sleeping very quietly; pulse 112, soft, and of good strength. Skin warm and soft. Expression and complexion natural. *No urine.*

15th. Report favorable this morning. Urine, during operation of an enema, very copious.

Case progressed from this time, and recovery was perfect.

CASE XII. (Case 79, page 390.) The patient was aged twenty-one years; and six months pregnant.

Visited Sept. 14th; previously attended by homoeopathic physician. This patient had, for some time, occasionally suffered from various affections of the head, such as dizziness, sense of fullness, pain, occurring suddenly from emotions, exertion, &c. There was often flushing of face, rash on the neck and cheek, coming and going suddenly. On the 11th instant, pain in the head, referred to the top, had been unusually severe. On the 12th, more severe. Cold water was prescribed to head. Much anasarca, with oedematous fullness of face and neck, had occurred. Had a convulsion on the 13th, at 8, P. M. Consciousness occurred after the spasm ceased. After about

an hour's interval, another spasm; and two more followed, consciousness still continuing.

Opium was given in *homœopathic* doses, and four hours interval followed. Spasms then recurred. Opium now failed to check them, and veratrine and belladonna were given, after the Hahnemann plan. After 7, A. M., 14th, and when a number of convulsions had occurred, consciousness was abolished. Homœopathy was then abandoned. About 3xx, of blood were next taken from the arm, and with some relief.

Dr. Channing was called at noon. Found the patient with a pulse of 120, not strong or full. Comatose; incapable of being roused. Skin hot, turgid, mottled; mouth open; tongue swollen, and protruded between the teeth. Os uteri and neck in ordinary state, at the supposed period of pregnancy. Uterine contractions had occurred.

A *pain* soon came on, and with it, a convulsion. The spasm was short, but little exceeding a minute; but as violent as Dr. C. thinks he ever saw. Heavy, almost suffocating stertor came on; and after some time, respiration became easier.

It was now agreed to use chloroform at the beginning and through the next *pain*, and to observe what followed. The spasm was over about ten minutes past 1, P. M. Contractions soon occurred, and chloroform was at once inhaled. No spasm attended or followed. *Pains* continued to occur, but no fits. At 4, another but lighter attack. It was sooner over, and the stertor less. The chloroform was now inhaled during a number of *pains*; then intermitted for one or more. Sinapisms were in the meantime applied to the lower extremities; a vesicating plaster to back of neck; cold to the head.

From 4 to 11, P. M., there was no fit. Contractions increased and os dilated. Chloroform was steadily continued. Once, *pain* being apparently less severe, a drachm of pulv. secal. was given as an enema. Good progress was made in the case.

Between 9 and 10, A. M., 15th, the child was born, and in an hour after was left with a good pulse and skin, and good promise of recovery, which promise seems to have been realized.

CASE XIII. In connection with the above case, Dr. Channing relates briefly a case detailed to him on the day succeeding the above occurrence, by a professional friend. In which very severe convulsions occurred, about thirteen hours *after* delivery. She had inhaled chloroform during labor. It was inhaled *during* the convulsions; and they were entirely controlled by

etherization. They amounted to four in all. Great prostration followed the suspension of the spasm. Fair reaction occurred after about twelve hours. Gradual sinking and death, a fortnight from the termination of labor. After death, was found evidences of pneumonia in a portion of the middle, and lower part of upper right lobes.

The urine *coagulated* by heat, confirmatory of Prof. Simpson's views; the kidneys were found normal; heart and brain healthy.

The two following cases have occurred later in Dr. Channing's practice and are copied condensed from the periodical in which they were first published:

CASE XIV. *Reported by Dr. Walter Channing,* Boston, Mass., Dec. 17th, 1848.*

Case a primipara, aged 22 years. A fortnight previous to the date of labor, (Dec. 17th,) was seized with convulsions; becoming comatose; breathing stertorous; pulse very rapid and small, and blood coming from nose and mouth; skin generally pale. A vein was opened, and thirty-two ounces of blood taken, followed by a perfect calm, and no return of the fits. In three or four days she walked abroad quite well.

A week after her recovery her physician called to see her. He found her complaining of most severe headache; referred to top and front of head, and almost immediately she said, "I can't see you, what is the matter!" He bound up her arm at once, and bled her again to full two pints. There were no convulsions.

On the 17th, between 8 and 9, A. M., labor had commenced. Her physician visited her very soon after, "in time to witness the faint fit which ushered in the labor." This was very severe; so that notwithstanding the former bleedings, and the pale skin, and very small and weak pulse, he thought it safer to bleed again, especially as such good effects had followed the former bleedings. He now took a pint. Convulsions continued to recur about once an hour through the day, the labor slowly advancing. At length, in the evening, progress had nearly or quite ceased; and the convulsions continuing, Dr. Channing was called in consultation.

Dr. C. found "the patient exceeding restless—very pale, lips as well as face,—skin cool, almost cold—pulse very small and feeble, about 140 in a

* American Journal Medical Sciences, April, 1849, p. 345.

minute. During pain, restlessness especially great. In intervals she lay most of the time in heavy sleep."

Dr. C. advised chloroform, which was used at once, being given in one of the intermissions between the convulsions, and she was speedily brought under its influence. Pains came on regularly, and efficiently; labor progressed rapidly; and delivery was speedily accomplished naturally. The womb contracted well, expelling the placenta, and was followed by no hæmorrhage. Dr. C. left the patient perfectly comfortable in about an hour and a-half after reaching the house.

The patient was seized with another convulsion about an hour after his withdrawal. Chloroform was at once used, and the fit was not as long nor as severe as had been others. There was frequent threatenings of fits during the night, by a convulsive twitching, or *drawing* of the head to one side, with rapid motion of the eyelids, the precursor of former convulsions. As soon as these signs manifested themselves, chloroform was inhaled, and not another fit occurred.

On the 19th, the patient was very comfortable; wide awake; color of cheeks good; pulse 96; warmth sufficient; says she felt "first rate." About a quart of urine was drawn off by the catheter, which resembled *turbid black tea*, into which much milk had been poured. It was entirely without smell, and had no appearance of urine. The application of heat, and nitric acid, gave most copious deposits of *albumen*.

CASE XV. Dr. Channing.*

"—— —, aged fifteen; first labor; April 16th, 1849, at about 1, A. M. Began with vomiting. Physician found her in violent convulsions; was very fleshy, and in perfect health; no error of diet; full blood-letting, about ℥xxx ; leeches to temple; terebinthinate enemata, cold to head.

I was called to see her about 1, P. M. Found her very ill; face pale; livid; respiration heavy, laborious; pulse from 192 to 200 in the minute, small, sharp; convulsions violent; os uteri dilatable; slightly dilated; show; head presenting. I advised chloroform; it was at once inhaled, and this very thoroughly; it checked the convulsions, so that no more occurred. The labor proceeded. At about 3, P. M., she recognized her mother, and gave other evidence of consciousness. I left her soon after, doing perfectly well. This patient was carefully watched, and whenever a convulsion was

* American Journal Medical Sciences, July, 1849, p. 43.

threatened, which was denoted always by wide-staring, fixed eyes, chloroform was immediately inhaled. In this instance, consciousness returned sooner than in any case which has come before me."

CASE XVI. *Dr. Keith, in the Monthly Journal of Medicine, August, 1850,** gives the following particulars of a case of puerperal convulsions treated by chloroform:

A lady, about the end of the seventh month of her first pregnancy, was suddenly seized with a convulsive fit, after suffering more or less for some days from headache, and slight feverish symptoms. The first fit occurred three hours before Dr. K. saw her, and in the interval she had three others. She had been bled, and the bowels had been freely opened. The fits ceased for a time, but after four hours they again recurred, and four followed each other in the course of less than an hour without any return to sensibility during the intervals. The bleeding was repeated very copiously, but seemed to have no effect in stopping the fits, or even in rendering them more moderate. Just as the fourth fit was coming on, chloroform was administered. It had an immediate effect in restraining the convulsive efforts, and she soon became perfectly quiet. Now, while under the influence of the chloroform, uterine contractions came on. The action of the chloroform was kept up, the labor went on steadily, and in six hours she was delivered of a still-born foetus, without any recurrence of the convulsions. She slept for nearly an hour after the termination of the labor, when she awoke in a confused state, but perfectly rational and almost free from headache. She made a most favorable recovery; indeed she had not a single bad symptom from the time the chloroform was administered.

The urine was highly *albuminous*, becoming almost solid on exposure to heat. The coagulability gradually went off, and after a fortnight there was scarcely a trace of it.

CASE XVII. At a meeting of the Newcastle and Gateshead Pathological Society, Mr. Andrew Bolton read notes of the following case:†

Elizabeth —, aged 22, unmarried, at the full period of a first pregnancy, healthy, but for some time in a desponding way, was seized, Jan. 9th, at 4, A. M., with pain in head and loss of vision. At 8, A. M., I was summoned in time to witness a severe convulsive paroxysm, attended with stertor, livid-

* Quoted from Amer. Journ. Med. Science, Oct., 1850, p. 532.

† Braithwaite's Retrospect, Part xxix, p. 284.

ity of countenance, and apparent impending suffocation. Twenty ounces of blood were drawn from the arms, and the cold douche unsparingly used to head and shoulders. In ten minutes she was calm again, the pulse reduced in tone 100. On examining the os uteri, it was felt high, slightly dilated, and extremely rigid. The mere introduction of digits sufficed to bring on the convulsions, which recurred again and again, with intervals of five or ten minutes, the whole muscular system participating in the spasms.

11, A. M. Paroxysms continue, and she is with much difficulty restrained. Two drachms of sol. morph. Ph. L. were given, producing an hour's repose.

12½ o'clock. Dose of morphia repeated, convulsions having returned with increased violence; countenance and general surface pale; the extremities cold. As her condition appeared hopeless, should the paroxysms continue, chloroform was administered on a piece of linen, in half-drachm doses, and its full effects kept up for three hours.

At 2, P. M., there was a slight return of convulsions; skin warm and perspiring; the os uteri was found steadily dilating; and from her uneasy movements it was apparent that uterine action had begun.

3½, P. M. The membranes were ruptured; and brisk uterine action ensuing, a dead child was expelled, immediately followed by the placenta. She regained her senses during the expulsive efforts, but appeared entirely ignorant of her previous condition. Recovery followed without any bad symptoms.

In conclusion, I would remark, that the convulsions were in no measure mitigated by the depletion, which was carried to the utmost; nor was there any yielding of the os uteri until the chloroform was inhaled.

CASES XVIII-XX. At a meeting of the New York Medical and Surgical Society,* Dr. Van Buren reported a case of puerperal convulsions, occurring in a lady, twenty-five years of age, with her first child. During gestation, she had enjoyed her ordinary health, except on the evening preceding the attack, when she had retired with a headache. Her physician was sent for at 1½ o'clock, A. M., and found her in a convulsion. Labor had not commenced.

An hour later Dr. Van B. was called, and found her in her third convulsion. It was now ascertained that the os uteri was beginning to dilate. Chloroform was immediately given, and after a time the convulsions were

* New York Medical Times, April, 1853.

relieved, when it was "let up," and the convulsions again returned. Its use was again resumed, and she was kept under its influence until about 6 o'clock, A. M., at which time the os being sufficiently dilated, the forceps were applied, and the delivery speedily completed. The patient was then left in a comfortable condition. Another convulsion, however, came on shortly afterwards, and they recurred every twenty minutes, except when chloroform was given, which controlled them. Other appropriate remedies were resorted to, but the anæsthetic was mainly relied upon. Its use was continued until a few hours before death, which occurred fifty-two hours after the first seizure. During all this time there was *no secretion of urine*.

At the same meeting, Dr. Metcalf stated, that in half a dozen cases occurring in his own practice, and another half dozen in the practice of his friends, when chloroform had been relied upon, but *one case* had terminated fatally.*

CASE XIX. Dr. McCready said, he had seen one case in which it was administered freely, but did not control the convulsions. This case, however, terminated fatally.

CASE XX. Dr. Delafield narrated a case in which it was given without at all controlling the disease, and the result was fatal. In the only case which terminated fatally in his practice the last year, chloroform was used.

(NOTE. Dr. Metcalf also stated, that a case of his own, in which the patient had but one convulsion, terminated fatally. A *post-mortem* examination revealed a clot in the brain. The report does not indicate whether it was the fatal *chloroform case* referred to above, or not. This fact, an important one, is not mentioned.

Dr. M. thought "that the tendency to a recurrence of the convulsions is owing to excessive nervous excitability; and as chloroform will undoubtedly allay this condition, he thought its use highly beneficial.")

CASE XXI. Reported by Prof. James P. White, Buffalo, N. Y.,†

July, 1853. Mrs. J., aged 24 years; third pregnancy; seventh month. After having suffered severely with what she supposed to be nervous

* This statement is so loose and indefinite, that the cases are not included in our analysis. It is simply given for *what it is worth* as a matter of testimony in favor of chloroform.

† Communicated to your committee.

headache, for two or three days, was attacked at about 10, A. M., with puerperal convulsions. Drs. Trowbridge and Wallis were called in and bled her moderately.

Prof. White visited her shortly after and commenced the administration of chloroform, and kept her moderately under its influence until 4 o'clock, P. M., without any recurrence of the convulsions. The chloroform was now suspended and the convulsions returned.

The mouth of the uterus being now dilatable, Prof. Flint and Dr. Wallis being present and concurring, and administering the chloroform, Dr. White turned and delivered. There was no return of the convulsions, but the patient was kept moderately under its influence for some hours. The urine was *albuminous*.

Recovery was perfect, and the lady has since born two children without any recurrence of convulsions.

CASE XXII. Dr. Hecker* relates the following: A primipara, æt. 23, had been in good health up to the time of labor. On the evening of the 6th December, she took a rich supper; she was taken ill in the night, and fell into convulsions. A period of four or six weeks was yet wanting to the term of gestation. No œdema.

The legs exhibited a perfect tetanic rigidity, and she foamed at the mouth and gnashed her teeth. Immediately on the cessation of a fit some urine was drawn by a catheter. The secretion was acid, and an enormous quantity of *albumen* was thrown down by heat. Chloroform was exhibited, and the uterine douche employed to hasten parturition. The douche had the desired effect; but the chloroform did not in the slightest degree diminish the intensity or frequency of the fits. The patient died soon after delivery.

An extravasation of blood, the size of a dollar, was found under the arachnoid, on the left hemisphere; and a similar one, but smaller, on the right hemisphere. The left kidney was shrunk to the third of its normal size, weighing only two ounces, and quite unfit for the excretion of urea. The right kidney was normal.

CASE XXIII. Reported by Prof. James P. White, Buffalo, N. Y.†

1855, Feb. 13th. Mrs. —, aged 27 years; second pregnancy. Labor

* Brit. and For. Med.-Chirurg. Review, July, 1854, p. 205.

† Communicated to your committee.

anticipated about a fortnight. Somewhat dropsical, extremities cedematous, but urine had not been tested.

During the night of the 12th and 13th, and morning of the 18th, she had had five convulsions previous to, and six convulsions succeeding to delivery; and had been freely bled.

At 11, A. M., was visited by Dr. White in consultation. Convulsions were occurring at this time as often as once in an hour, and were very severe. Coma profound. Pulse 160.

The administration of chloroform was immediately commenced, and continued until seven or eight o'clock at evening without any further return of convulsions. Upon the withdrawal an opiate injection was given.

Convalescence was protracted, but recovery was finally perfect.

The urine was tested during the illness and found to be *albuminous*.

This patient has since given birth to a healthy child at full period without any recurrence of convulsions.

CASE XXIV. Dr. Hecker* has also given the following case, evidently for the purpose of establishing the value of the means used for the purpose of inducing premature labor, but as *chloroform* was employed in the treatment, and as the short abstract of the report contains *contradictory* testimony as to its influence, we give it for what it is worth toward establishing its value as a remedial agent. The active *mechanical means* resorted to in the case, undoubtedly should not be lost sight of in the estimate:

"A strongly-built primipara, aged 20, fell into convulsions, with loss of consciousness, in her sixth month; the urine contained a great quantity of *albumen*; the legs and abdomen were cedematous. Cold affusions to head, mustard cataplasma, *chloroform*, were *useless*. To bring on labor, India-rubber bladders were applied to the breasts, and at the same time, the colpeurynter to the uterus; besides this, the os uteri was dilated by the finger. The most *violent convulsions* during the operation, were *moderated by chloroform*. The child breathed some hours. Consciousness returned on the birth of the child. The albuminous character of the urine lasted, gradually lessening, till the fourteenth day. The woman recovered slowly."

CASES XXV-XXVII. M. Frémineau,† Feb., 1856, report three cases, in

* Brit. and For. Med.-Chirurg. Review, April, 1855, p. 440.

† Brit. and For. Med.-Chirurg. Review, July, 1856, p. 211.

which chloroform was employed, of which the following brief and imperfect abstracts have been given to the English reader:

1. A primipara, aged 25, at end of gestation had general cephalgia, redness of face, vertigo, vomiting. At access of labor a sudden intense fit of eclampsia, with protrusion of the tongue, which cut and compressed by the teeth, became so swollen that asphyxia seemed imminent. This state lasted for two days. Delivered of a living child. Symptoms persisted; convulsive fits very frequent. Chloroform inhalations, lasting twenty minutes each, and an injection of chloroform. After each inhalation, the patient fell into a state of complete sedation; then, when a fit appeared imminent, she was again submitted to anaesthesia. In the evening she was much better. This treatment was continued for three days, during which time the fits gradually diminished in frequency and severity.

CASE XXVI.—2. A primipara, aged 24, six months pregnant, had been seized two days with eclampsia when admitted, (25th March, 1855,) into the Hôtel-Dieu, under M. Piedagnel. Loss of consciousness, dilated pupils, convulsive movements, *no albuminuria*. Attacks followed by hemiplegia. Venesection, and potion containing twenty minims of chloroform. Next day, another attack; same treatment. 27th, another attack; venesection. From the 1st to the 7th April, the consciousness and movement returned; at times, still stiffness in limbs; prolonged baths. The 11th, a violent fit; venesection, and chloroform potion. Patient improved. The 14th, after some annoyance, another violent fit; venesection, chloroform potion. Patient now very anæmic. Question of artificial delivery discussed; postponed. Slight convulsive attacks recurred at intervals until delivery on 13th May. Child living. No attacks after delivery.

CASE XXVII.—3. A primipara, aged 24, was delivered at the Hôtel-Dieu, in the night of the 21st–22d Nov. For some days before, headache, vertigo; a fit of eclampsia on the 19th, the day when indications of commencing labor appeared. 22d, profound coma, dilated immovable pupils, stertorous breathing, and occasional convulsive shocks; chloroform potion. 23d, better. 24th, coma, but no convulsions. 25th, consciousness. From this time gradual recovery.

(NOTE. The value of the above three cases is much impaired by the imperfect manner in which they are reported. Case 1 is not full, and 2 and 3 are especially imperfect. An entire month is passed over in Case 2, without an account of treatment; and what influence the chloroform *potion* had ascribed

to it, is not mentioned. Whether any other treatment in Case 3, besides the chloroform potion, was employed, is not recorded.)

CASE XXVIII. The following Case has been furnished the Committee, by Dr. Strong, of Westfield, Chautauque Co., N. Y.

July 31st, 1856. Mrs. G., aged 22 years; first pregnancy; in the sixth month of gestation. Saw her in consultation with Dr. Pupikofer.

Had exercised too much the day before, and to add to the trouble, had slipped down, jarring herself. When I saw her, was having pains hourly, going into convulsions at outset of pain, and remaining in them about half an hour, followed by half an hour's quiet. Put her at once under chloroform. The next pain she did not lose consciousness, and it passed off in five minutes. The intermissions grew longer and pains shorter, till after eight hours ceased giving chloroform, having first given morphine and asafœtida.

She went full time, and was delivered, with no abnormal disturbance. Previous to giving chloroform no anodynes relieved her at all.

CASE XXIX. Communicated by Prof. Austin Flint, Buffalo, N. Y.

Mrs. I. B., aged 23 years. Prior to marriage had enjoyed good health. She became pregnant a month after marriage. In the early part of pregnancy she suffered much from nausea and vomiting. During the last two months she was greatly anasarcaous. The urine was highly *albuminous*. The anasarca was some diminished after giving the bitart. potass.

She was confined on the 28th of Nov., 1856. The external parts of generation were much swelled from dropsical effusion, but the labor progressed rapidly and the delivery took place without trouble. The labor commenced at 6½, A. M., and was ended at 8, A. M. The patient took chloroform moderately during the labor.

Mrs. B. seemed quite comfortable until 12½, P. M., when she was seized with a convulsion while sleeping. It lasted two or three minutes. In an hour a second occurred. The paroxysms continued to occur at first pretty regularly after an hour's interval. They then became more frequent, recurring every 15 or 20 minutes, lasting from one to three minutes. They resembled in all points epileptic convulsions.

Prof. F. began the use of chloroform after the first convulsion, and kept her under its influence for several hours. This prevented him from knowing what would have been the mental condition in the interval. At length, the chloroform was omitted for some time. She was then restless and deli-

rious between the paroxysms, attempting to get out of bed and requiring to be restrained. The use of the chloroform was resumed still more freely, and apparently postponed the paroxysm for an hour.

The embarrassment of breathing during the paroxysms was very great and stertor continued for some time after the convulsive movements ceased. Finally, the stertor continued constantly, and she expired directly after a severe paroxysm twelve and a-half hours after the first paroxysm. She had in all twenty-two paroxysms.

In addition to the chloroform, one drop of croton oil was administered. This was four hours before her death. No dejection followed. The loss of the power of deglutition prevented the repetition of this medicine. This constituted the treatment. The pulse had considerable volume and force.

Prof. James P. White saw the patient in consultation four hours before her death.

CASE XXX. *Communicated to Committee, by Prof. James P. White, Buffalo, N. Y.*

1857, June. Mrs. W., the mother of several children, a large fleshy woman, but of an impaired state of health, so much so that she had been under medical treatment, more or less of the time for the previous year. Had been under Dr. White's care.

Being arrived at full period of gestation, on the evening of the 1st of June, she complained of headache, severe enough to lead to the apprehension of convulsions, although there was no increase of the pulse.

During the night labor came on, and was accomplished after a brief labor, without any unusual attendant circumstances, and Dr. W. left the patient at five o'clock, A. M., apparently doing well.

Within the next hour she was suddenly seized with convulsions. She was visited almost immediately, and found to be still in convulsions and *flowing* profusely. Some time elapsed before the uterine hæmorrhage was checked, and a large amount of blood was lost.

The administration of chloroform was immediately commenced and continued through the day, the inhalations being generally commenced at the approach of every convulsive seizure. Drop doses of croton oil were administered every one or two hours during the day.

Consciousness never returned; but towards nine o'clock, P. M., of the 2d, the convulsions ceased, the comatose condition remaining. During the day and night the bowels continued perfectly insensible to the impressions of croton oil, or of injections.

At 9, A. M., of the 3d, no very perceptible change, except that bowels were freely moving off. Unconscious, except that she would answer when loudly spoken to, but her replies furnished no connection with the questions put to her. At times restless. Chloroform not now given. No apparent change during the day.

On the morning of the 4th, no apparent change for the better, and no encouragement given to the husband to expect recovery; whereupon he proceeded to call a Botanic physician. The patient died in the course of the day, or day after.

The urine in this case was *albuminous*.

CASE XXXI. *Communicated to Committee, by Jas. S. Hawley, M. D., Buffalo, N. Y.*

Dec. 12, 1857. Mrs. Maynard, pregnant with her second child, had been suffering from slight labor pains for the last forty-eight hours. Had been visited by me on the evening of the 11th, previous to her confinement, but as her labor did not seem to have begun, I left her. She complained of constant thirst and frequent micturition. On the 12th reached the house about 8 o'clock, P. M., and found she had had two convulsions and was still unconscious from their effects. Her attendants informed me that she had complained of headache in the evening, and at the time of the convulsive attack was much congested about the head and face. Inferring from this description that the convulsions were apoplectic in their character, I determined to bleed her if my inference was sustained. On the occurrence of another convulsion, the appearances of congestion were not so well marked as I expected to see, still I proceeded to draw about $\frac{3}{4}$ of blood, when the state of the pulse admonished me to stop. Another convulsion followed in about fifteen minutes, when I administered half a grain of morphine, and sent to town, (about two miles,) for chloroform. The next convulsion was followed by another half grain of morphine. After this she remained fifty minutes without a convulsion, which was nearly three times the previous interval. Chloroform was now administered moderately, but the convulsions returned with increased evidence of cerebral congestion. Pulse 120, full and hard, and face flushed and hot. Another bleeding was resolved upon: sixteen ounces were taken. The convulsions not returning, the chloroform was not again used.

She had seven convulsions from $7\frac{1}{2}$ to 11 o'clock. Up to the time the convulsions ceased, the labor had made no progress. The remainder of the

labor was short and easy, and the patient was delivered of twins: the first at 4 o'clock, living, but very small; the second half an hour after, dead, but larger than the first.

Urine taken during the convulsions showed evident traces of *albumen*; that taken on the second day after exhibited no traces of it. She had taken cream of tartar for thirty-six hours previous to taking the second specimen. Recovery was favorable.

CASE XXXII. *Communicated by Prof. James P. White, of Buffalo, N. Y., to Committee.*

Jan. 10th, 1838. Mrs. H., aged 26 years, in her first pregnancy; seven months advanced. On the evening of the 9th was attacked with headache, and had some imperfection of vision, but not of so severe a character as to cause her to take to the bed.

Early on the morning of the 10th was attacked with convulsions, and Dr. Nott was called, and bled her freely. During the day she had eight convulsions; at 1 o'clock, P. M., when Dr. White visited her, he found her in complete coma; pulse 130; breathing stertorous; and bowels not been moved for three days; os uteri undilated; bladder distended, and urine, upon being drawn off by the catheter and tested, was found to be *albuminous*.

Before 8 o'clock, P. M., she had another convulsion, at which hour she was brought under the influence of the chloroform. Croton oil was administered every hour until copious dejections were procured. Messrs. Mason and Butler remained with her to administer the chloroform. She was kept moderately under its influence continuously, and when any manifestation of uneasiness, or indications towards a return of convulsions, the chloroform was increased. Until three o'clock, A. M., a period of seven hours, there had been no return of convulsions; during which time the bowels were freely moved. At this hour the condition of the patient being so promising chloroform was omitted, and the young gentlemen in attendance returned to their homes.

At 5 o'clock, A. M., labor was completed, Dr. Nott at the time being present, and a healthy male fœtus was born, accompanied by two convulsions rapidly succeeding each other. Now she was again put under the influence of chloroform, and its moderate impression maintained for several hours. There was no more return of the convulsions. Consciousness gradually returned during the day. A full opiate injection was administered towards the withdrawal of the chloroform.

Recovery from this time steadily progressed, and she was dismissed on the tenth day, at which time the albumen had disappeared from the urine.

CASE XXXIII. *A primipara, aged fifteen years and nine months, delivered at full term, of twins, by the forceps, after having been about fifty hours in labor, Puerperal Convulsions having supervened; both infants living, and together with the mother, doing well.* In the practice of Dr. GOULD. Operation by Prof. WHITE. Case attended and reported by BENJ. HEATON LEMON, M. D., Assistant Accoucheur to the "Buffalo Lying-in and Foundling Hospital of the Sisters of Charity."*

Maria Holland, first menstruated at the age of fourteen; the catamenia last appeared in the latter part of May, 1857. She has had good health during gestation, with the exception of swelling of the lower extremities for the last three weeks, which disappeared entirely just previous to labor.

She was taken in labor Thursday afternoon, Feb. 4th, and attended by Dr. Austin Flint, Jr., at the request of Dr. Gould, whose patient she was. No progress had been made, however, or was making.

Friday afternoon Dr. Gould saw her. Little progress; parts dry, and the os uteri rigid; exhibited nauseating doses of antimony.

At 7, P. M., I first saw her. Nausea was considerable, retching had occurred several times; the pains were frequent and apparently efficient; the mouth of the womb was dilated to about the size of half a dollar; the parts cool, moist, and soft.

At 12, P. M., she had frequent, strong bearing down pains; the "os" was dilated to about the size of half a dollar piece; the lips thin and membranous; the parts well lubricated and cool; considerable nausea.

Shortly after twelve the pains became less and less frequent and efficient; and at 1 o'clock, A. M., had ceased altogether; she slept till nearly 2 o'clock; on awaking she had a convulsion, followed in five minutes by another, more severe but shorter: scarcely ended, however, when another began. After an interval of three-quarters of an hour's rest, another convulsion; in five minutes more, another: these were of short duration. Chloroform was administered with the apparent effect of shortening and lessening the severity of the paroxysms. After an interval of fifteen minutes, a sixth convulsion, which was followed by three-quarters of an hour's calm and sleep, from which she was awakened by a seventh convulsion, followed in ten minutes by an eighth, when she rested half an hour. Each of the preceding parox-

* Buffalo Medical Journal, April, 1858, 679.

yams lasted, about one and a-half minutes by the watch. A fit of three minutes' duration succeeded this rest, not as severe, apparently, though of longer duration than the preceding ones. Two more convulsions recurred at an hour's interval. From this time the patient was kept partially under the influence of chloroform.

She had twelve convulsions from 2 o'clock, A. M., up to 7, A. M. Between these hours she took two drachms of ergot infused in a pint of water. No perceptible effect was produced by it, however, being probably inert.

Under the partial influence of chloroform the patient remained passive, until the arrival of Prof. White and Dr. Newman, at half past 10, A. M.

Dr White drew off a small quantity of urine; ruptured the membranes; advised cold to the head, one drop of croton oil to be given immediately, and the continuance of the chloroform as before.

Dr. Newman, on testing the urine, *found no albumen.*

Shortly before twelve, slight pains were manifested at intervals. Dr. White pushed up the head in order that the waters might drain away with more facility. After this active labor set in, the pains being efficient and at regular intervals, so that by 2 o'clock, P. M., the vertex presented at the "os-externum," when the contractions again ceased, and the patient lay passive till half past two, when a convulsion succeeded.

Prof. White, at half past 3, P. M., delivered her under chloroform, with the forceps, of a live female child by the head; shortly after, with his hand of an asphyxiated female child, the feet presenting. Ergot was given, the æbundines soon followed, and the womb contracted well.

The convulsions came on not so quickly but that the patient could give notice of it. They began first by severe pain in the head, then shaking of the extremities, and finally, the whole body becoming violently convulsed, the head thrown back, the jaws clamping on a cork covered with a rag, to protect the tongue; foaming at the mouth; the jaws towards the close of the fit becoming set on the cork; the eyes wide, staring, and strabismic.

The paroxysm would terminate with sobbing and gasping; a deep stupor would follow, with stertorous respiration for some minutes, when the patient would recover sufficiently to speak. Their average duration was about two minutes each, recurring at intervals of from five, ten, fifteen minutes, and an hour.

If chloroform was inhaled just previous to the access of the paroxysm, it would shorten and alleviate its severity if not prevent it entirely; little benefit seemed to be derived from it after the fit was on, respiration being partially suspended.

It may be worthy of remark, that in this case the convulsions twice supervened upon the cessation of labor pains; that the children were born alive, after the length of time in labor, with the addition of convulsions.

No albumen was found in the urine either before or after delivery.

The following case presents several points of interest; the uræmic symptoms being well marked, leading to apprehensions of convulsions; and as a preventive measure chloroform was employed. We have separated it from the other cases, and have not included it in our analysis, to avoid the objection which might be raised,—that the testimony which we have collected in the body of the report does not sustain the position of the *absolute* sequence and *invariable* development of convulsions upon the manifestation of albuminuric symptoms. This we shall not attempt to deny, or refute. At the same time, we would put the inquiry to any and every practitioner, whether he would not recognize in the symptoms developed in this case, every cause to anticipate an attack of convulsions during the course of labor; and if such an attack had been developed, whether he could have succeeded in framing an excuse which would have been received as sufficient by the profession, for neglecting to employ measures in anticipation of, or as preventive of an attack! And we would inquire farther, whether he would not under the circumstances, regard an escape from convulsions as a most happy deliverance!

CASE. Communicated by P. H. Strong, M. D., Buffalo, N. Y.*

June 30th, 1857. I was called to attend Mrs. H., Niagara street, in her first confinement. She was of a frail, delicate constitution, and had marked œdema of the lower extremities and face; and which was also evident over the rest of her body, but less marked. She was pale and exsanguined; pulse about 100 and weak. She had for some time previously, been troubled with a good deal of *impairment of vision*; and also considerable *pain in region of kidneys*.

Her appearance at once suggested heart or kidney disease, one or both. An imperfect physical examination of the heart, I thought revealed some degree of hypertrophy with slight effusion in pericardium.

As soon as practicable, and at an early stage of her labor, I subjected her urine to the heat test for *albumen*, which test revealed a deposit of a moderate amount of that product.

* See Buffalo Medical Journal, Aug., 1857, Transactions Buffalo Medical Association, p. 151.

With these indications, and superadded thereto the fair prospect from every source of a distressing and protracted labor, I became quite apprehensive of convulsions either during, or immediately succeeding labor.

The indications to my mind being imperative, to lighten the prospective heavy tax upon her very impressible nervous system, I resorted to *chloroform*.

Deeming it undesirable to produce complete anæsthesia, I strove for and obtained its partial, or benumbing effect with each pain; at no time producing complete unconsciousness. It produced in slight doses the happiest effects in allaying morbid sensibility, and in tranquilizing and sustaining her nervous system, and thus her muscular and vital forces.

The result was delivery after a labor of some ten hours, with no convulsions: though during the last hour, there was considerable involuntary nervous and muscular action of her system.

Her recovery was unusually protracted, but I believe is quite complete, though I have not examined her for kidney disease, or albuminuria, since the night of her labor.

An analytical examination of the foregoing cases of convulsions exhibits the following points of interest:

The number of cases of convulsions collected, ... 33

Of these there were: Primiparæ, ... 17

Multiparæ, ... 9

Not stated, ... 7

Of the subjects of the convulsions there

Recovered, ... 24

Died, ... 9

The pathological symptoms and conditions are recorded as follows:

Described as being anasarcaous, ... 7 cases.

The condition of the urine was noted in 19 cases.

Of these, it is described as being albuminous in 12 "

Not albuminous in 2 "

Dark colored in 3 "

No secretion of urine, ... 2 "

Attacks preceded by falls, or injuries, ... 2 cases.

Points in reference to Treatment; so far as noted in detail of the cases:

Bloodletting was employed *before* the use of the anæsthetic agents, in 19 cases.

Chloroform was employed *previous* to bloodletting, or *without* venesection, in 10 cases.

Anæsthetics succeeded by bleeding in 1 case.

Marked effects noted as *following* the use of *anæsthetics* in modifying and controlling convulsive movements in 23 cases.

The number in which chloroform did not diminish the convulsions, ... 6 cases.

Termination of cases in which it is stated that *venesection* had been employed *previous* to administration of ether, or chloroform:

No. of cases,	19
Of these, there Recovered,	16 cases.
Died,	3 "

Termination of cases where *chloroform*, or *ether*, was administered *without* bloodletting being employed:

No. of cases,	9
Recovered,	6
Died,	3

Cases proving *fatal* where *chloroform* was administered, without previous treatment being indicated, ... 2

No. of cases where chloroform, or ether having been administered at first with apparent benefit, subsequently appeared to lose their effects, other anti-spasmodics, (tinct. opii and asafoet.) were given:

No. of cases,	3
Recoveries,	2
Died,	1

Post-mortem appearances in deaths following the administration of chloroform:

In two fatal cases following the use of chloroform, extravasation of blood within the brain or upon its surface, was found.

One case (xiii,) died a fortnight after the convulsions, and a *post-mortem* examination disclosed pneumonia; with healthy kidneys, brain and heart. I have called this case in this analysis a recovery from the convulsions.

Prof. White moved that the report be accepted and made the special order of business at the next regular meeting. This motion was seconded and carried

Prof. Hamilton presented a specimen of a tumor of the parotid gland, complete extirpation of the mass, including the entire gland; which is reported in full in another portion of the Journal.

The association then adjourned.

AUSTIN FLINT, JR., M. D.,
Secretary *pro tem*.

ART. III.—*Report of Mortality in Buffalo for the month of March, 1858.*

By H. D. GARVIN, M. D., Health Physician.

DISEASES.	No.	Males.	Females.	No Sex given.
Accidental, ...	5	5		
Asthma, ...	1	1		
Born Sickly, ...	2	1	1	
Bronchitis, ...	3		3	
Croup, ...	2	1	1	
Congestion of Lungs, ...	3	2	1	
" " Brain, ...	1		1	
Convulsions, ...	16	9	7	
Diarrhoea, ...	2	1		1
Dysentery, ...	2		2	
Dropsy, ...	1		1	
Eclampsia, ...	1		1	
Enteritis, ...	2	1	1	
Exhaustion, ...	1		1	
Fever, Typhoid, ...	3	1	2	
" Scarlet, ...	4	3	1	
Gastritis, ...	3	2	1	
Heart Disease, ...	3	2	1	
Hydrocephalus, ...	8	3	3	2
Influenza, ...	2	1	1	
Intemperance, ...	5	3	2	
Insanity and Epilepsy, ...	1	1		
Marasmus, ...	3	1	1	1
Measles, ...	2	1	1	
Old Age, ...	6	3	3	
Paralysis, ...	1	1		
Phthisis Pulmonalis, ...	17	9	8	
Pneumonia, ...	9	4	3	2
" Typhoides, ...	1	1		
Premature Birth, ...	2	1		1
Puerperal Fever, ...	2		2	
" Convulsions, ...	1		1	
Pulmonary Apoplexy, ...	1	1		
Rheumatism, ...	1	1		
Scrophula, ...	3	2	1	

REGISTER OF MORTALITY—Continued.

DISEASES.	No.	Males.	Females.	No Sex given.
Spinal Disease,.....	1		1	
Still-born,.....	8	5	2	1
Syphilis Testiary,.....	1	1		
Uterine Cancer,.....	1		1	
Total,.....	134	69	55	8

SEXES.

Males,.....	69
Females,.....	55
Sex not given,.....	8
Total,.....	134

AGES.

Still-born,.....	8	Between 20 years and 30 years,.....	13
1 day,.....	4	" 30 " " 40 ".....	13
1 day and 30 days,.....	3	" 40 " " 50 ".....	7
Between 1 month and 6 months,.....	10	" 50 " " 60 ".....	10
" 6 months and 12 ".....	12	" 60 " " 70 ".....	6
" 1 year " 3 years,.....	13	" 70 " " 80 ".....	7
" 3 " " 5 ".....	5	" 80 " " 90 ".....	1
" 5 " " 10 ".....	9	" 90 " " 100 ".....	0
" 10 " " 20 ".....	3	" 100 ".....	0
	67		57
Ages not given,.....	10		134
Total,.....	134		

NATIVITIES.

American,.....	79	Prussian,.....	0
German,.....	24	Swiss,.....	0
Irish,.....	18	French,.....	1
English,.....	5	Scotch,.....	2
Canadian,.....	2	Bohemia,.....	0
Holland,.....	1	Country not given,.....	2
Total,.....			134

EDITORIAL DEPARTMENT.

To the Subscribers of the Buffalo Medical Journal.—Three years since I assumed the ownership of this Journal, and also the sole editorial conduct. The experiment was pecuniarily successful for the two first years, and my relations with subscribers such as were pleasant. Events have since occurred which have withdrawn me entirely from the practice of medicine, the labor involved in other duties has compelled me to tender a reluctant resignation of my Professorship in the Medical Department of the University of Buffalo, and for some months past my only connection with the profession of medicine has been through this Journal. It is not fitting that I should assume to be a teacher, or a mouthpiece of opinion, in a profession wherein I do not work.

In view of this, my connection with the Buffalo Medical Journal, both as editor and proprietor, ceases with the present number. Arrangements have been made for its continuance under the competent editorial management of Dr. Austin Flint, Jr., who has, in fact, had its exclusive control for several months past. During that period he has evinced a capacity for his position which does him honor and renders the Journal, in my opinion, the most desirable monthly in the country for the general practitioner.

The accounts of the old concern remain in my hands. Bills are enclosed in this number to all who are indebted to me, and those who find no bill may take it for granted that they owe me nothing. It is my right to insist on the prompt remittance of the amounts called for by these bills. During the past year, disastrous to all pecuniary enterprises, the Journal has been published by me with promptness and regularity at a heavy personal loss. I expected this when it became evident that a financial crisis was impending, but my obligations to advance paying subscribers compelled me to go on in the face of difficulty. I have paid my printers month by month and owe them nothing, but have been seriously embarrassed by doing so. I

now ask those indebted to me to make good my losses by prompt payment of the small amounts due from each. Last year it was impossible for them to do this—now no such excuse exists. It is better for the Journal that I should retain these accounts, as it saves the new proprietor the annoyance of the old bills, and enables subscribers to start anew with no embarrassments from old arrearages. Remittances on old accounts must therefore be made to myself only.

And now, business set aside, I cannot part with my old readers without a word. It is five years since I became connected with the Journal. I came to it fresh from rural practice, ambitious and hopeful. All those hopes and ambitions have been realized—to an extent far more than I deserved. Yet I have turned aside to other paths, at first slightly wandering, then gradually widening the distances. For a time I tried to do too many things, and went about with the text “Unstable as water, thou shalt not excel!” ringing hourly in my ears. Now I am anchored at the editorial desk of a daily paper, and there I hope to remain, with an influence no longer weakened by division.

During this five years, however, I have labored with industry and such consistency as was natural to me, to elevate the legitimate profession of medicine, to honor its noble achievements and vindicate its high claim upon the respect and confidence of community. Sustained by a band of contributors of such talent, learning, and honorable reputation as few other medical periodicals can boast, it has been no difficult task to present a good journal. Here at home, Flint, Hamilton, White, Rochester, Newman, Nichols and others, particularly among the membership of the Buffalo Medical Association, have lent such aid as I should be very grateful for. Under the new management all these will continue to contribute, and with them many others abroad who will be equally welcome. Thus a claim is established upon the confidence of the profession which should be met with a prompt and cordial support.

To my old subscribers, who have wintered and summered with the Journal for years, I can only say in parting that I am now as ever,

Cordially their Friend,

SANFORD B. HUNT.

A New Retreat for the Insane.—We would call the attention of our readers to the establishment of a new retreat for the insane, at Canandaigua,

under the direction of Dr. Geo. Cook, a gentleman who is highly accomplished in this important and difficult branch of medical science, and has had a large experience in the New York State Lunatic Asylum. There could be no location for such an establishment more favorable than the village of Canandaigua, and physicians who commit their patients to Dr. Cook's care, will enjoy the advantages of the purest air, judicious treatment, and frequently a contiguity to the patient's residence, which is highly desirable.

Journal de la Physiologie de l'homme et des animaux, Publié sous la direction Du Docteur E. Brown-Séquard.

We have received the first number of this Journal, which our readers will recollect as announced by us a month or two since. Its arrival we hail with satisfaction, from the benefit and pleasure which we expect personally to derive from its pages; and we are confident that the ends which this journal proposes to accomplish, in furnishing an exclusive medium for researches in the department of Physiology and the kindred branches of science, will be amply fulfilled.

It is the purpose of the editors to present all the principal original labors of the French physiologists, and an historical *resumé* of the progress and changes of physiology in all countries. "Thanks to their personal relations with most physiologists of our day in Europe and America, the editors of this journal, among whom the editor in chief is happy to name, Dr. Ch. Robin, Ch. Ronget and Tholozan, will readily procure all the important publications (journals, books, theses, pamphlets, etc.) which have for their object human and comparative physiology, and will thus give, as complete a *resumé* as possible of the progress of this science.

"We are happy to announce that we are able to count upon the collaboration of most of the French physiologists, and many physiologists of Germany, England, and America, and we believe in consequence, that we may seriously promise that all the numbers of this journal will be rich in original memoirs, not solely from the ordinary editors, but from a large number of other physiologists.

"The authors who may wish to publish their articles in this journal, will here have an absolute freedom of scientific discussion; but the editor in chief deems it his duty to state in advance, that the object of this publication is purely the advancement of science, and that personal polemics will invariably and completely be excluded."

"This journal, will have for its object, in addition to pure physiology,

1st. *Organic chemistry, hygiene, toxicology and legal medicine, in their relations with physiology.*

2d. *Descriptive anatomy, comparative anatomy, teratology, and normal and pathological histology, in as far as they throw light upon physiology.*

3d. *The application of physiology to the practice of medicine, surgery and obstetrics."*

We have translated enough of the prospectus to give our readers an idea of the objects which this journal has in view; its first number is issued in admirable style by Bailliere and Son, of Paris, and contains 216 pages, making a volume of about the size of the North American Medico-Chirurgical Review. It will be published quarterly, and can be subscribed for by application to B. Waterman & Co., 290 Broadway, New York, or J. Pennington, of Philadelphia. The price of subscription in this country, is 25 francs, or about \$5.

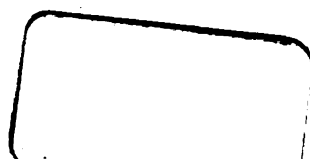
In this number we notice articles from Brown-Séquard, Robin, Blendiot, and other eminent French physiologists, as well as Bence Jones, and Dickinson, of England, and F. G. Smith, of our own country.

We are, indeed, gratified to be able to anticipate that some of the labors of our countrymen will at last become known to the French before the lapse of a half a century; and though our facilities for the study of these branches are not so great, and though our government is insensible as yet to the importance of scientific advance, yet we have produced, and will produce works with which it is incumbent upon scientific men of all countries to become acquainted, and we hope that pure-minded physiologists will make use of this avenue, as freely as the importance of the subject demands.

Medical Society of South Western New York.—This society will hold its annual meeting at Westfield, on Wednesday and Thursday, May 5th and 6th, at which meeting officers for the ensuing year will be elected. The Address by Dr. C. E. Washburn, on Wednesday evening. Dinner Thursday, at 12½ o'clock, for Physicians, their wives, and invited guests.

Committee.—Drs. J. Spencer, A. Cochrane, and T. D. Strong.

v 15 763



N 13 763